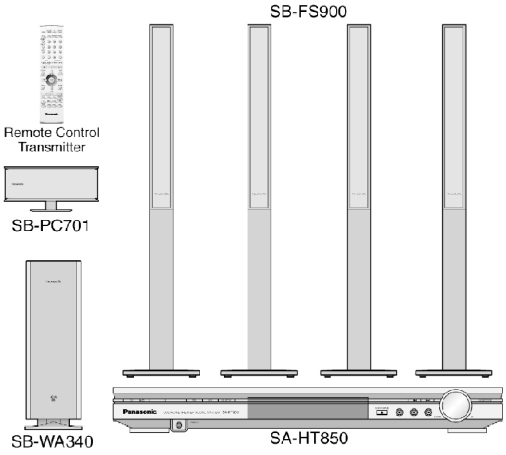
ORDER NO. MD0304127C2

DVD Home Theater Sound System

SA-HT850E / SA-HT850EG

Colour

(S)...Silver Type


SB-FS900
Remote Control Transmitter
SB-PC701
SB-WA340
SA-HT850

SPECIFICATIONS

Specification

■ Amplifier Section

RMS Output Power:	
Dolby Digital Mode, 10% Total harmonic distortion	
1 kHz Front CH	55 W per channel (6 Ω)
1 kHz Surround CH	55 W per channel (6 Ω)
1 kHz Center CH	160 W per channel (6 Ω)
100 Hz Subwoofer CH	220 W per channel (4 Ω)
Total RMS Dolby Digital Mode Power	600 W
DIN Output Power: Dolby Digital Mode, 1% Total Harmonic Distortion	
1 kHz Front CH	40 W per channel (6 Ω)
1 kHz Surround CH	40 W per channel (6 Ω)
1 kHz Center CH	120 W per channel (6 Ω)
100 Hz Subwoofer CH	150 W per channel (4 Ω)
Total DIN Dolby Digital Mode Power	430 W
Input sensitivity/Input impedance	
AUX	350mV, 10 kΩ

■ FM Tuner Section

Frequency Range	87.50-108.00 MHz (50-kHz step)
Sensitivity	2.5 μV (IHF)
S/N 26dB	2.2 μV
Antenna terminals	75 Ω (unbalanced)
Preset station	15

■ AM Tuner Section

Frequency Range	522-1629 kHz (9-kHz step)
AM Sensitivity S/N 20dB at 999 kHz	560 μV/m
Preset station	15

■ Disc Section

Disc played	(one layer per side)
DVD-Audio/Video	8 cm/12 cm, single/double-sided, single/double-layer
DVD-RAM/R (DVD-Video formatted discs)	
CD (CD-DA), Video-CD	
CD/VCD/MP3/WMA	8cm/12cm, CD-R/RW
Video	
Signal system	NTSC/PAL (depend on disc format)

Output level	**Composite video 1 Vp-p (75 Ω) S-video Y 1 Vp-p (75 Ω) S-video C 0.3 Vp-p (75 Ω) (PAL) 0.286 Vp-p (75 Ω) (NTSC)**
Audio	
Sampling frequency	
CD	**44.1 kHz**
MP3	**32 kHz, 44.1 kHz, 48 kHz**
DVD	**192 kHz (Audio) 48 kHz, 96 kHz (Video)**
Bitrate	
MP3	**32-320 kbps**
Decoding	**16/20/24 bit linear**
Pick up	
Beam Source	**Semiconductor Laser**
Wavelength	
CD/VCD	**780 nm**
DVD	**658 nm**
Number of channels	**5.1 ch (FL, FR, SL, SR, C, SW)**
Frequency response	**20 Hz-20 kHz (+1, -2dB)**
Wow and flutter	**Less than possible measurement data**
Digital filter	**8 fs**
D/A converter	**Delta signal DAC**

■ General

Power Supply	**AC 230V, 50 Hz**
Power consumption	**25 W (SA-HT850), 250 W (SB-WA340)**
Dimensions (W x H x D)	**430 x 52 x 390 mm**
Mass	**3.3 kg**

■ System

SC-HT850 (E)	**Main unit: SA-HT850 (E) Satellite speakers: SB-HT900 (P) Active subwoofer: SB-WA340 (E)**
SC-HT850 (EG)	**Main unit: SA-HT850 (EG) Satellite speakers: SB-HT900 (P) Active subwoofer: SB-WA340 (E)**

Power consumption in standby mode (Subwoofer): 0.7 W

Note:

1. **Specifications are subject to change without notice. Mass and dimensions are approximate.**
2. **Total harmonic distortion is measured by the digital spectrum analyzer.**

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Panasonic

1. SAFETY PRECAUTIONS

1.1. GENERAL GUIDELINES

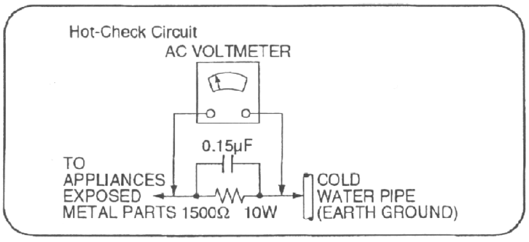
1. When servicing. observe the original lead dress. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.
2. After servicing, see to it that all the protective devices such as insulation barriers, insulation papers shields are properly installed.
3. After servicing, make the following leakage current checks to prevent the customer from being exposed to shock hazards.

1.1.1. LEAKAGE CURRENT COLD CHECK

1. Unplug the AC cord and connect a jumper between the two prongs on the plug.
2. Measure the resistance value, with an ohmmeter, between the jumpered AC plug and each exposed metallic cabinet part on the equipment such as screwheads, connectors, control shafts, etc. When the exposed metallic part has a return path to the chassis, the reading should be between 1M Ω and 5.2 Ω . / When the exposed metal does not have a return path to the chassis, the

reading must be ∞ .

Fig. 1



1.1.2. LEAKAGE CURRENT HOT CHECK (See Figure 1.)

1. Plug the AC cord directly into the AC outlet. Do not use an isolation transformer for this check.
2. Connect a 1.5k Ω , 10 watts resistor, in parallel with a 0.15 μ F capacitors, between each exposed metallic part on the set and a good earth ground such as a water pipe, as shown in Figure 1.
3. Use an AC voltmeter, with 1000 ohms/volt or more sensitivity, to measure the potential across the resistor.
4. Check each exposed metallic part, and measure the voltage at each point.
5. Reverse the AC plug in the AC outlet and repeat each of the above measurements.
6. The potential at any point should not exceed 0.75 volts RMS. A leakage current tester (Simpson Model 229 or equivalent) may be used to make the hot checks, leakage current must not exceed 1/2 milliamp. In case a measurement is outside of the limits specified, there is a possibility of a shock hazard, and the equipment should be repaired and rechecked before it is returned to the customer.

2. Handling the Lead Solder

2.1. About lead free solder (PbF)

Distinction of PbF P.C.B. :

P.C.B.s (manufactured) using lead free solder will have a PbF stamp on the P.C.B.

Caution:

- Pb free solder has a higher melting point that standard solder; Typically the melting point is 50 - 70°F (30 - 40°C) higher. / Please use a high temperature soldering iron. In case of the soldering

iron with temperature control, please set it to 700 ± 20°F (370 ± 10°C).

- **Pb free solder will tend to splash when heated too high (about 1100°F/600°C).**
- **When soldering or unsoldering, please completely remove all of the solder on the pins or solder area, and be sure to heat the soldering points with the Pb free solder until it melts enough.**

3. Before Repair and Adjustment

Disconnect AC power, discharge Power Supply Capacitors C12, C42 through a 10 Ω, 10 W resistor to ground.
DO NOT SHORT-CIRCUIT DIRECTLY (with a screwdriver blade, for instance), as this may destroy solid state devices.
After repairs are completed, restore power gradually using a variac, to avoid overcurrent.
Current consumption at AC 230V-240V, 50Hz in NO SIGNAL mode should be ~850 mA .

4. Protection Circuitry

The protection circuitry may have operated if either of the following conditions are noticed:

- **No sound is heard when the power is turned on.**
- **Sound stops during a performance.**

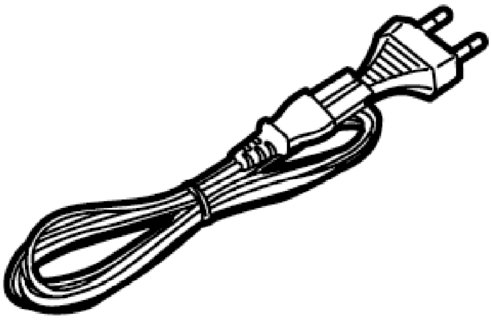
The function of this circuitry is to prevent circuitry damage if, for example, the positive and negative speaker connection wires are
"shorted", or if speaker systems with an impedance less than the indicated rated impedance of the amplifier are used.
If this occurs, follow the procedure outlines below:

1. **Turn off the power.**
2. **Determine the cause of the problem and correct it.**
3. **Turn on the power once again after one minute.**

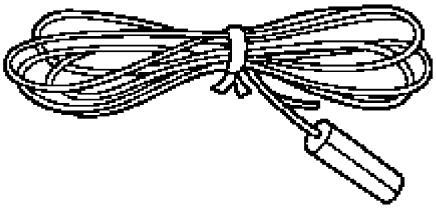
Note :
When the protection circuitry functions, the unit will not operate unless the power is first turned off and then on again.

5. Accessories

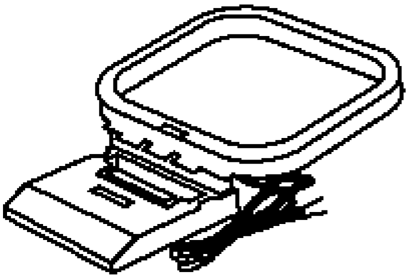
AC mains lead



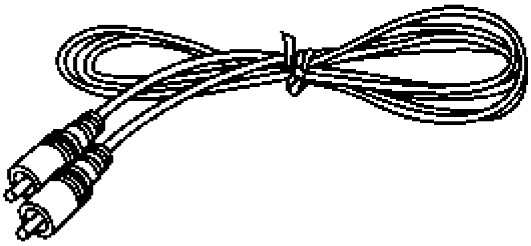
FM indoor antenna



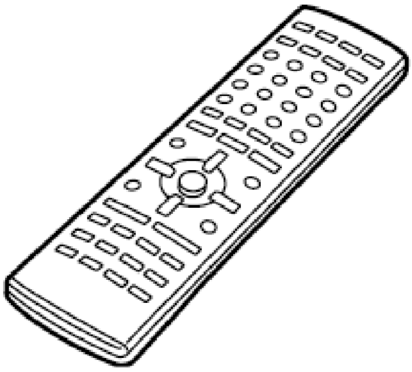
AM loop antenna



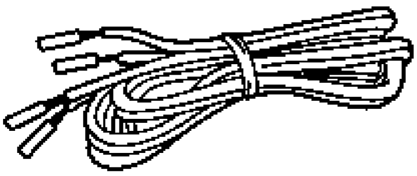
Video cable



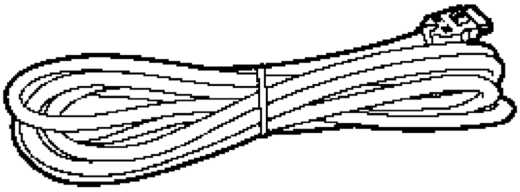
Remote control



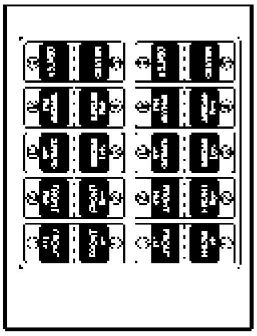
Speaker cables



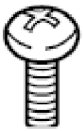
System cable



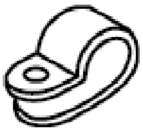
Sheet of speaker-cable stickers



Screws



Clamper



6. Control Reference

7. Disc Information

8. Prevention of Electro Static Discharge (ESD) to Electrostatically Sensitive (ES) Devices

Some semiconductor (solid state) devices can be damaged easily by electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field-effect transistors and semiconductor “chip” components. The following techniques should be used to help reduce the incidence of

component damage caused by electro static discharge (ESD).

1. **Immediately before handling any semiconductor component or semiconductor-equiped assembly, drain off any ESD on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging ESD wrist strap, which should be removed for potential shock reasons prior to applying power to the unit under test.**
2. **After removing an electrical assembly equiped with ES devices, place the assembly on a conductive surface such as aluminium foil, to prevent electrostatic charge build up or exposure of the assembly.**
3. **Use only a grounded-tip soldering iron to solder or unsolder ES devices.**
4. **Use only an anti-static solder remover device. Some solder removal devices not classified as “anti-static (ESD protected)” can generate electrical charge to damage ES devices.**
5. **Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.**
6. **Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminium foil or comparable conductive material).**
7. **Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.**

   Caution

   Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.
8. **Minimize bodily motions when handling unpackaged replacement ES devices. (Otherwise harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity (ESD) sufficient to damage an ES device).**

IMPORTANT SAFETY NOTICE

There are special components used in this equipment which are imporant for safety. These parts are marked by ⚠ in the schematic diagrams, Exploded Views and replacement parts list. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire, or other hazards. Do not modify the original design without permission of manufacturer.

9. Precaution of Laser Diode

ON :

This product utilizers a class 1 laser. Invisible laser radiation is emitted from the optical pick up lens.

When the unit is turned on:

Wavelenght : 658nm/780nm

Maximum output radiation power from pick up : 100 µ W/VDE

1. **Do not disassemble the optical pick up unit, since radiation from exposed laser diode is dangerous.**
2. **Do not adjust the variable resistor on the pick up unit. It was already adjusted.**
3. **Do not look at the focus lens using optical instruments.**
4. **Recommend not to look at pick up lens for a long time.**

ACHTUNG :

Dieses Produkt enthält eine Laserdiode. Im enigeschalteten Zustand wird unsichtbare Laserstrahlung von der Lasereinheit abgestrahlt. / Wellenlänge : 780nm / Maximale Strahlungsleistung der Lasereinheit : 100 µ W/VDE / Die Strahlung an der Lasereinheit ist ungefährlich, wenn folgende Punkte beachtet werden:

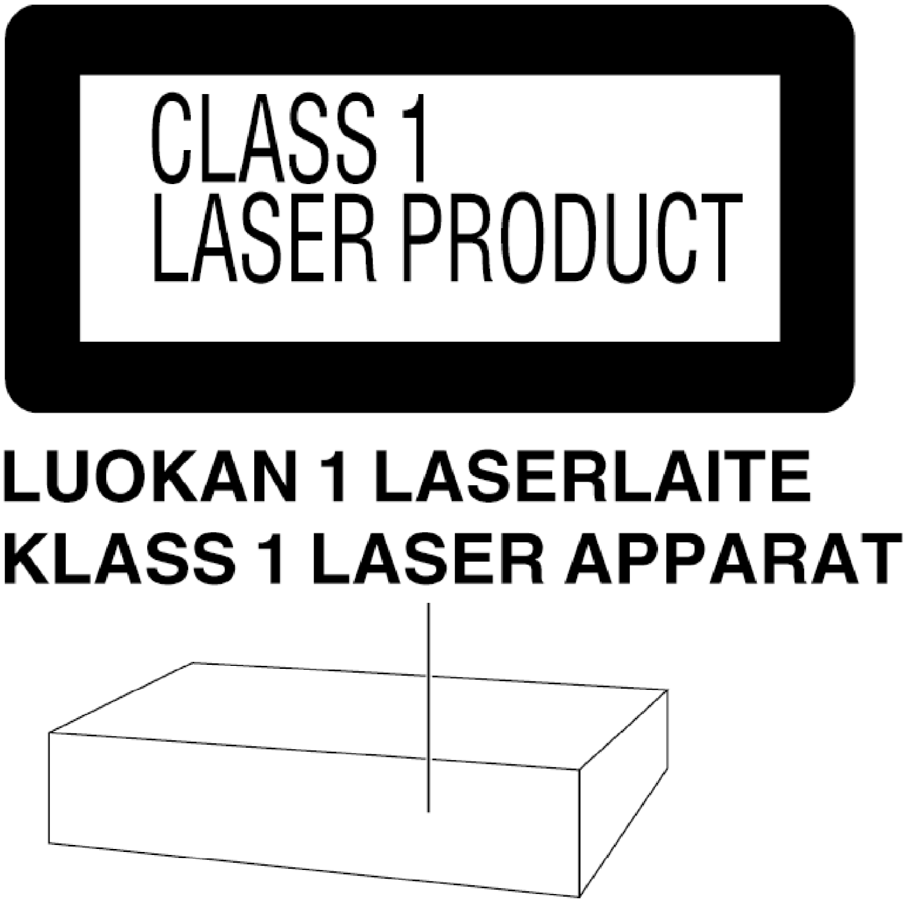
1. **Die Lasereinheit nicht zerlegen, da die Strahlung an der freigelegten Laserdiode gefährlich ist.**
2. **Den werkseitig justierten Einstellregler der Lasereinhit nicht verstellen.**
3. **Nicht mit optischen Instrumenten in die Fokussierlinse blicken.**
4. **Nicht über längere Zeit in die Fokussierlinse blicken.**

ADVARSEL: I dette a apparat anvendes laser.

CAUTION!

THIS PRODUCT UTILIZES A LASER.
USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN TH
SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

■ **Use of Caution Labels**


CLASS 1
LASER PRODUCT
LUOKAN 1 LASERLAITE
KLASS 1 LASER APPARAT

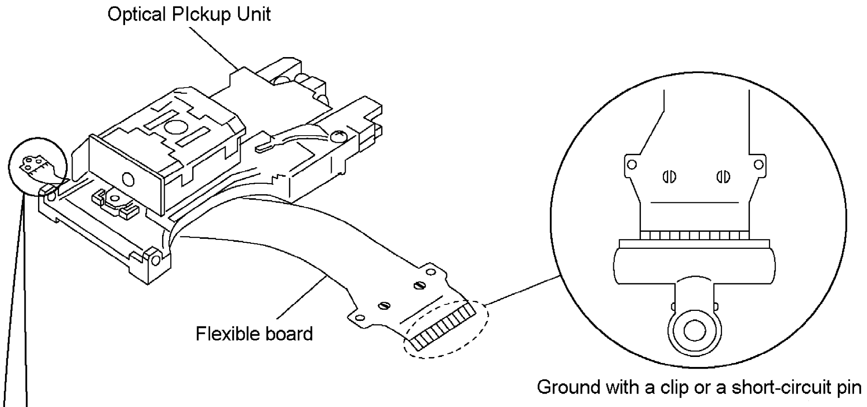
10. Cautions to Be Taken When Handling Optical Pickup

- **The laser diode used inside optical pickup could be destroyed due to static electricity as a potential difference is caused by electrostatic load discharged from clothes and human body. Handle the parts carefully to avoid electrostatic destruction during repair.**

10.1. Handling Optical Pickup

1. **Do not impact on optical pickup as the unit structurally uses an extremely precise technology.**
2. **Short-circuit the flexible cable of optical pickup removed from the circuit board using a short-circuit pin or clip in order to prevent laser diode from electrostatic destruction. (Refer to Fig. 10-1 and Fig. 10-2.)**
3. **Do not handle flexible cables forcibly as this may cause snapping. Handle the parts carefully. (Refer to Fig. 10-1)**
4. **A new optical pickup is equipped with an anti-static flexible cable. After replacing and connecting to the flexible board, cut the anti-static flexible cable. (Refer to Fig. 10-1)**

Fig. 10-1


Optical PIckup Unit
Flexible board
Ground with a clip or a short-circuit pin

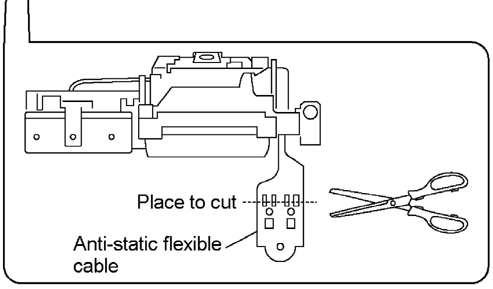
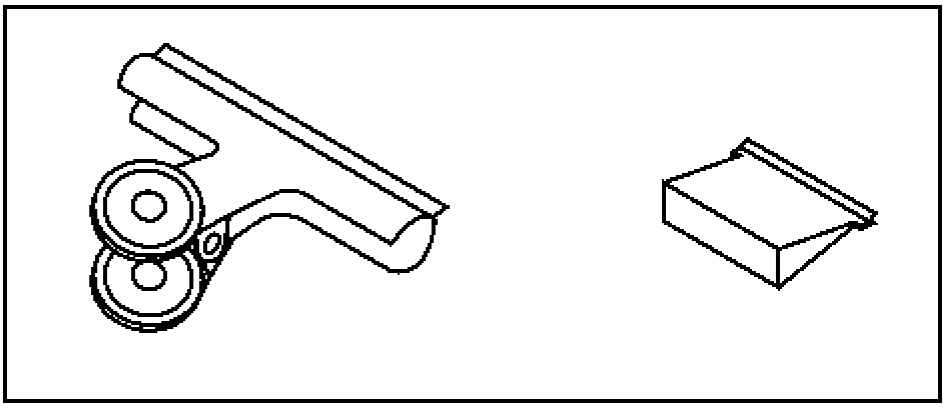

Place to cut
Anti-static flexible cable

Fig. 10-2



Clip or shorting pin

10.2. Cautions to Be Taken During Replacement of Optical Pickup

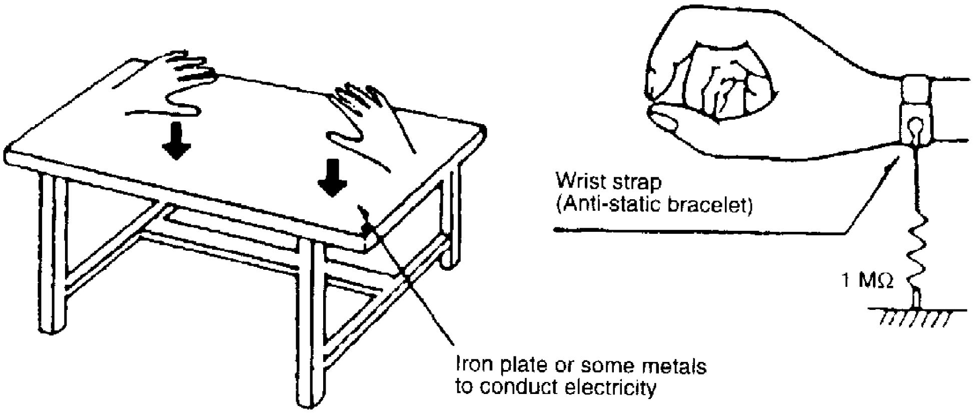
Supplied optical pickup is equipped with a short clip found its flexible cable in order to prevent electrostatic destruction of laser diode. Before connection, remove the short clip, and check that the short land is opened (remove solder if the part is short-circuited).

10.3. Grounding for Preventing Electrostatic Destruction

1. **Human body grounding**
   Use an anti-static wrist strap to release static electricity accumulated in your body. (Refer to Fig. 10-3)
2. **Workplace grounding**
   Place a conductive material (conductive sheet) or iron board where optical pickup is placed. (Refer to Fig. 10-3)

Note:
Keep your clothes away from optical pickup as wrist strap does not release the static electricity charged in clothes.

Fig. 10-3



11. Disassembly and Main Component Replacement Procedures and Operational Check

“ATTENTION SERVICER”

**Some chassis components may have sharp edges.
Be careful when disassembling and servicing.**

1. **This section describes procedures for checking the operation of the major printed circuit boards and replacing the main components.**
2. **For reassembly after operation checks or replacement, reverse the respective procedures.
   Special reassembly procedures are described only when required.**
3. **Select items from the following index when checks or replacement are required.**

Contents

- **Checking of Main Unit when Active Subwoofer is not used**
- **Disassembly flow chart**
- **PCB Positions**
- **The Top Cabinet**
- **The Rear Panel**
- **Replacement of Tuner Pack Unit and Interface PCB**
- **The DVD Module (2) PCB and B/E Bracket A & B**
- **The DVD Mecha Unit**
- **The Front Panel**
- **Replacement of the Volume PCB and Sensor PCB**
- **Reeplacement of the Main, Panel, Power Supply and TV/VCR PCB**
- **Checking PaneL, DVD Module (1), DVD Module (2) A side, Buffer-AMP, Sensor and Volume PCB**
- **Checking Main, DVD Module (2) B side, Power Supply and TV/VCR PCB**
- **Disassembly and assembly Mechanism Unit**

Warning:

This product uses a laser diode. Refer to caution statement

Precaution of Laser Diode.

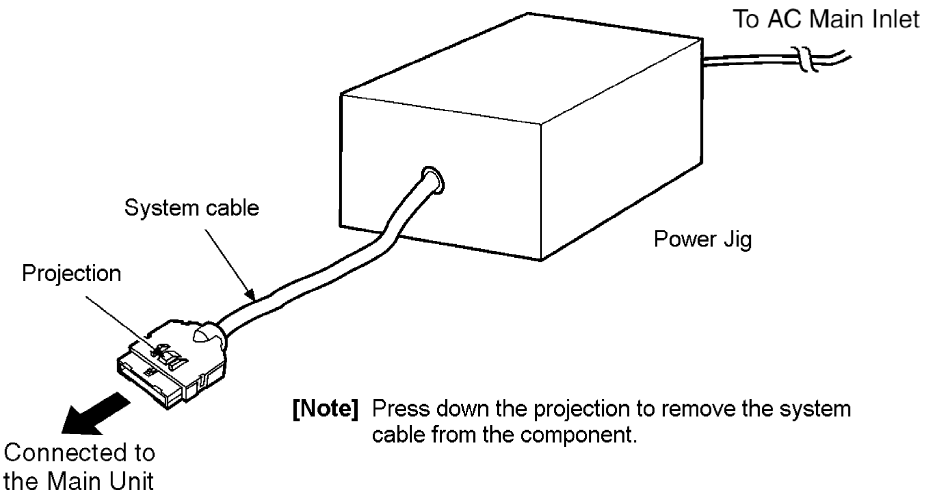
ACHTUNG:

Die Lasereinheit nicht zerlegen.

Die Lasereinheit darf nur gegen eine vom Hertsteller spezifizierte Einheit ausgetauscht werden.

11.1. Checking Main Unit when Active Subwoofer is Not Used

The unit uses the active subwoofer to supply the power of the component, and the active subwoofer should be connected to the component to check operational conditions of the component. / If the active subwoofer is not available due to repair of the unit, use the following equipment.



[Note] Press down the projection to remove the system cable from the component.

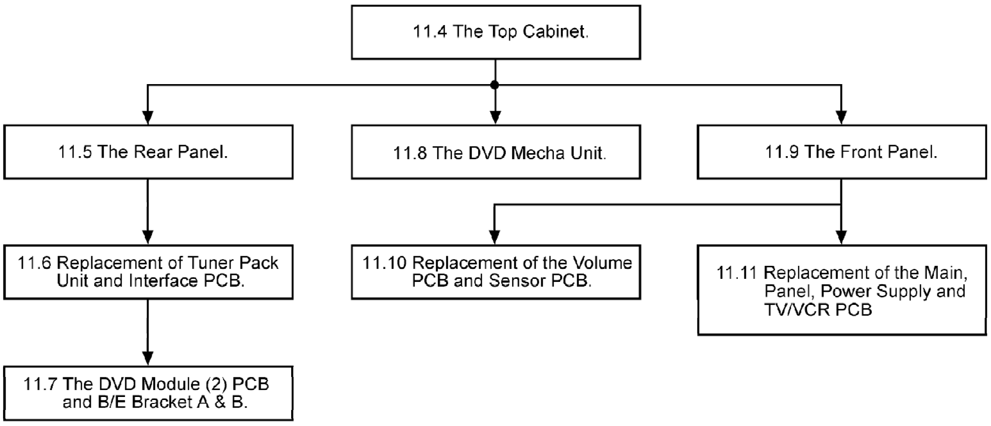
Power Jig number

RFKZ0182 (110V, 127V, 220V, 230V-240V for Overseas domestic use) [SPC]

11.2. Disassembly flow chart

The following chart is the procedure for disassembling the casing and inside parts for internal inspection when carrying out the servicing

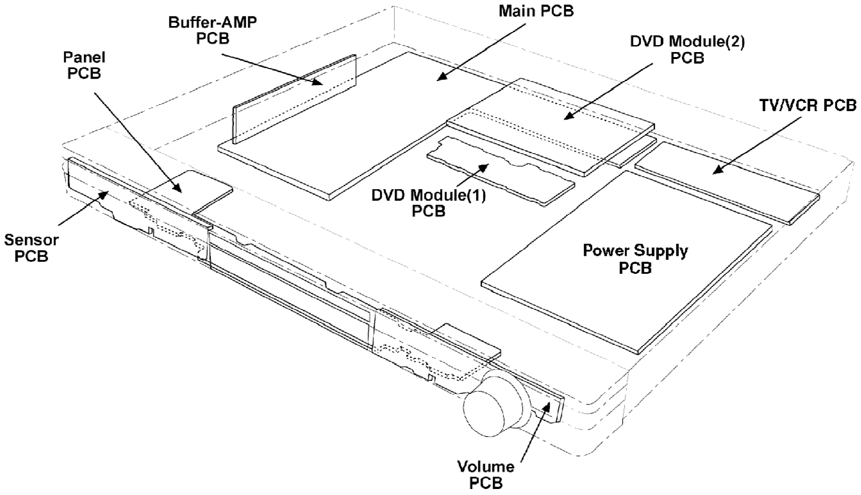
To assemble the unit, reverse the steps shown in the chart below.


11.4 The Top Cabinet.
11.5 The Rear Panel.
11.8 The DVD Mecha Unit.
11.9 The Front Panel.
11.6 Replacement of Tuner Pack Unit and Interface PCB.
11.10 Replacement of the Volume PCB and Sensor PCB.
11.11 Replacement of the Main, Panel, Power Supply and TV/VCR PCB
11.7 The DVD Module (2) PCB and B/E Bracket A & B.

11.3. P.C.B. Positions

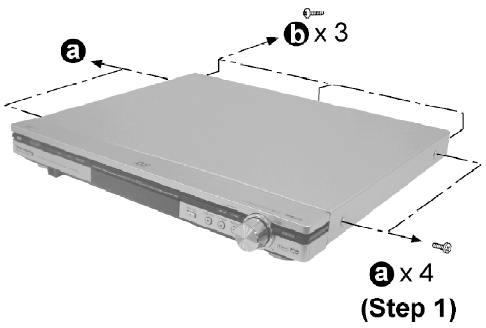
The following chart is the procedure for disassembling the casing and inside parts for internal inspection when carrying out the servicing

To assemble the unit, reverse the steps shown in the chart below.

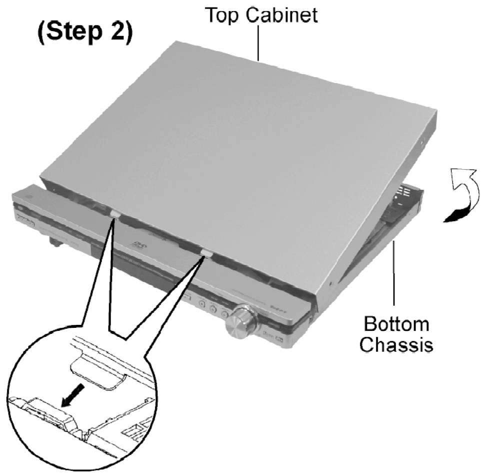

Buffer-AMP PCB
Main PCB
DVD Module(2) PCB
Panel PCB
TV/VCR PCB
Sensor PCB
DVD Module(1) PCB
Power Supply PCB
Volume PCB

11.4. The Top Cabinet

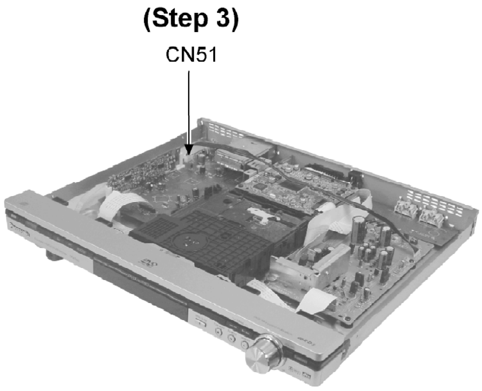
Step 1: Remove all the screws.


a
b x 3
a x 4
(Step 1)

Step 2: Remove the Top Cabinet as arrow shown below.

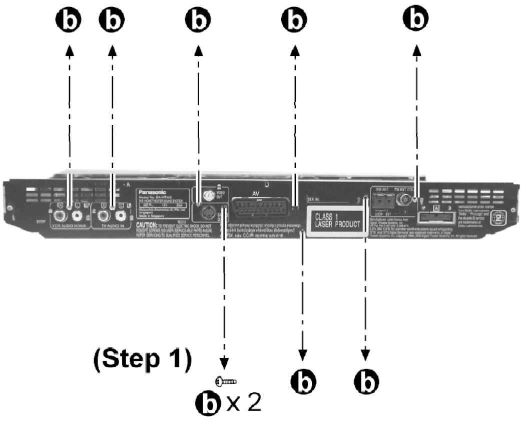

(Step 2)
Top Cabinet
Bottom Chassis

Step 3: Remove the Connector (CN51).

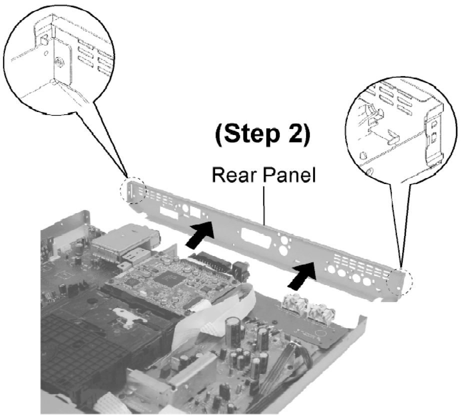


11.5. The Rear Panel

Step 1: Remove all the screws.

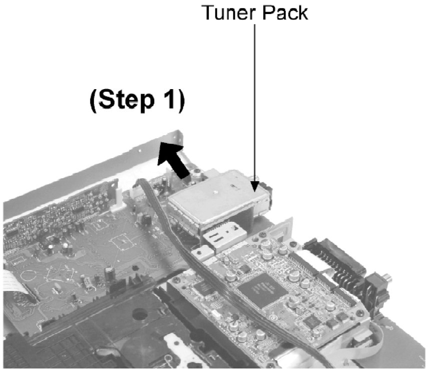


Step 2: Remove the Rear Panel as arrow shown below.

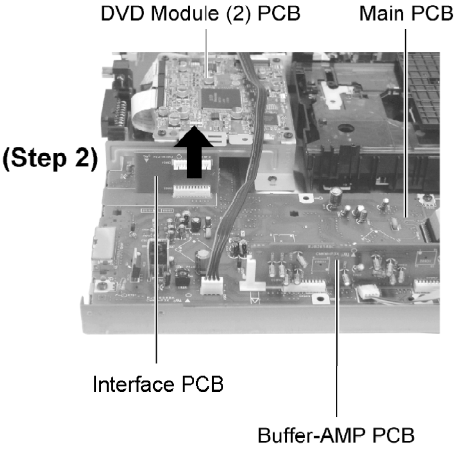

(Step 2)
Rear Panel

11.6. Replacement of Tuner Pack Unit and Interface PCB

Step 1: Remove the Tuner Pack as arrow shown below.

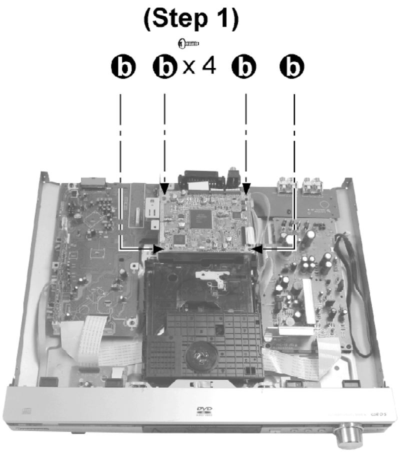

Tuner Pack
(Step 1)

Step 2: Remove the Interface PCB as arrow shown below.

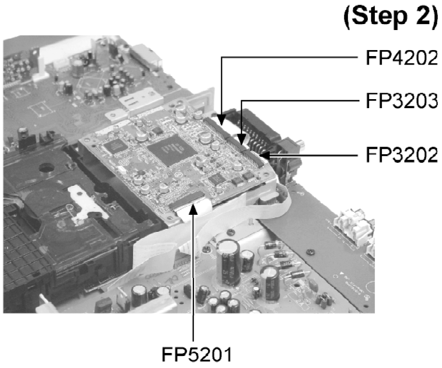

DVD Module (2) PCB
Main PCB
(Step 2)
Interface PCB
Buffer-AMP PCB

11.7. The DVD Module (2) PCB and B/E Bracket A & B

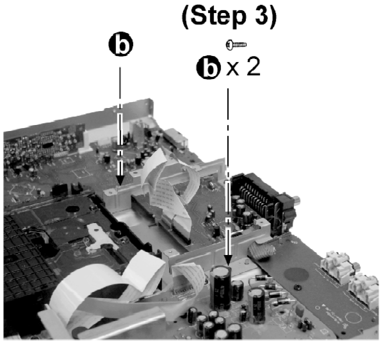
Step 1: Remove all the screws.



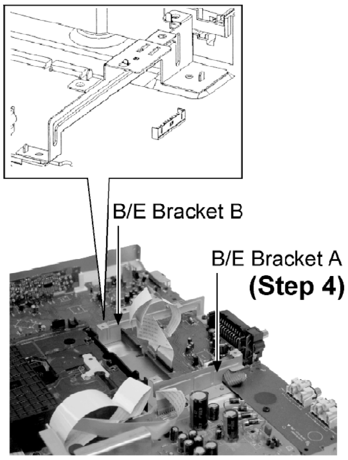
Step 2: Release all the FFC as shown below.


(Step 2)
FP4202
FP3203
FP3202
FP5201

Step 3: Remove all the screws.



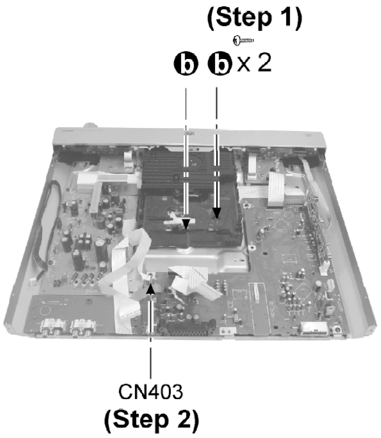
Step 4: Remove the B/E Bracket A & B.


B/E Bracket B
B/E Bracket A
(Step 4)

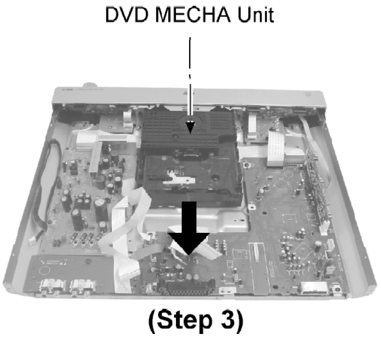
11.8. The DVD Mecha Unit

Step 1: Remove all the screws.

Step 2: Release the FFC.

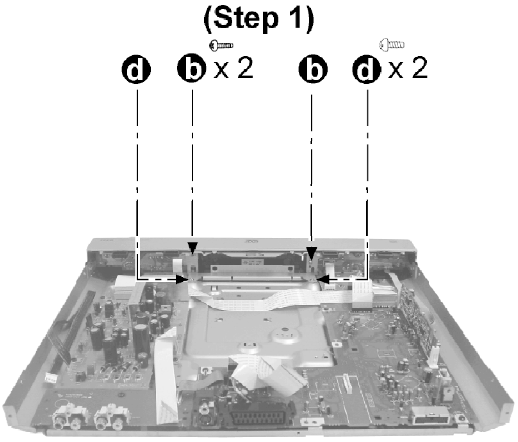

(Step 1)
ⓑ ⓑ x 2
CN403
(Step 2)

Step 3: Remove the DVD Mecha Unit as arrow shown.


DVD MECHA Unit
(Step 3)

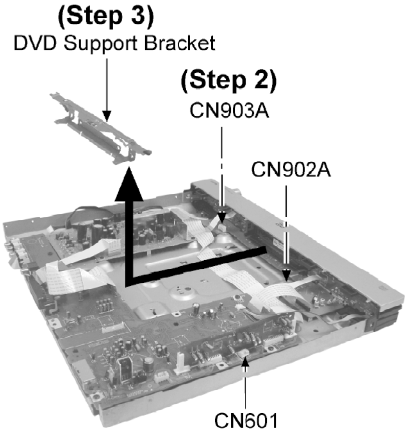
11.9. The Front Panel

Step 1: Remove all the screws.

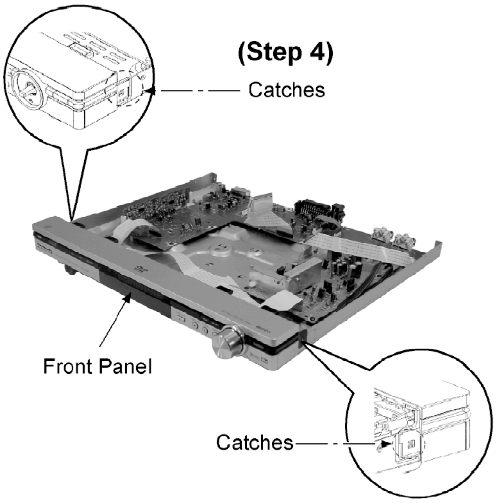

(Step 1)
d
b x 2
b
d x 2

Step 2: Release all the FFC and Connector (CN601).

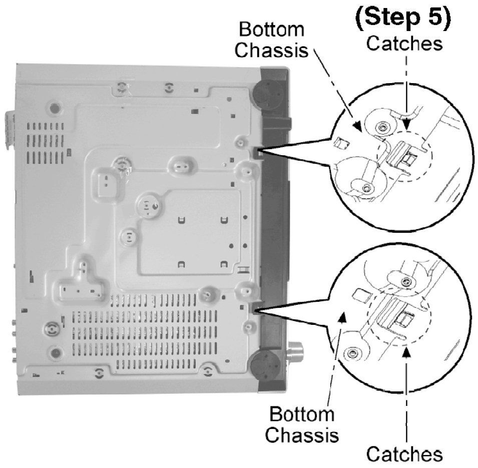
Step 3: Remove the DVD Support Bracket as shown below.


(Step 3)
DVD Support Bracket
(Step 2)
CN903A
CN902A
CN601

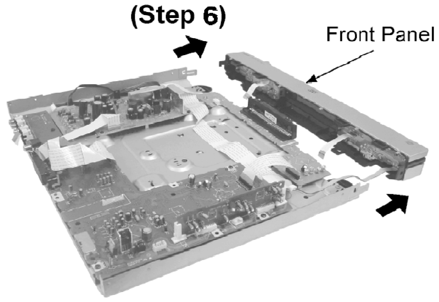
Step 4: Release the catches properly from Left/Right Front Panel.


(Step 4)
Catches
Front Panel
Catches

Step 5: Release the catches properly from bottom chassis.

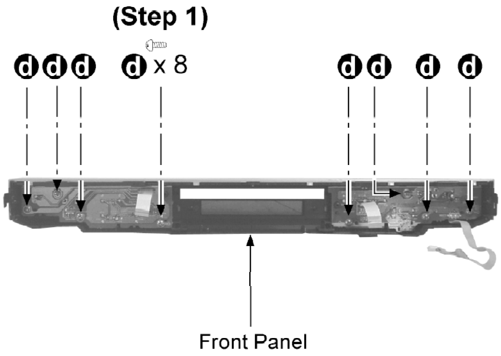

(Step 5)
Bottom Chassis
Catches
Bottom Chassis
Catches

Step 6: Remove the Front Panel as arrow shown below.

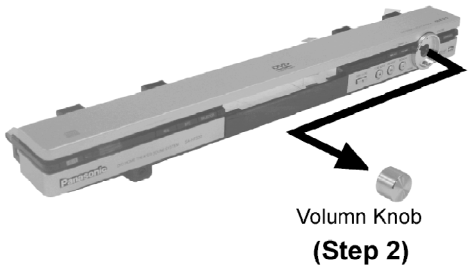

(Step 6)
Front Panel

11.10. Replacement of the Volume PCB and Sensor PCB

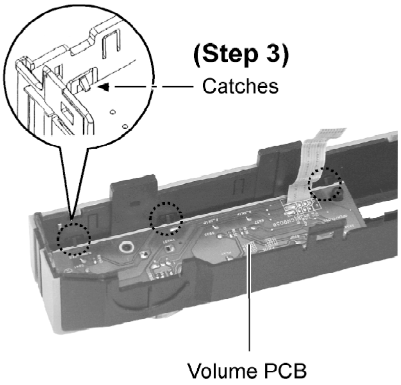
Step 1: Remove all the screws.


(Step 1)
ⓓⓓⓓ ⓓ x 8 ⓓⓓ ⓓ ⓓ
Front Panel

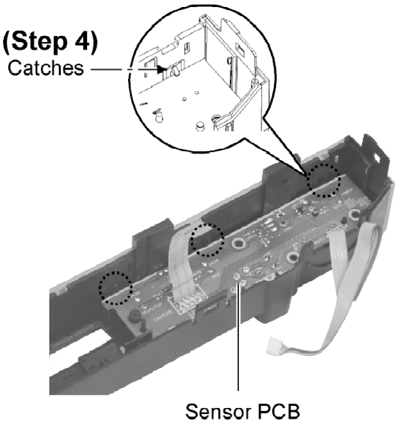
Step 2: Remove the Volume knob.


Volumn Knob
(Step 2)

Step 3: Release all the catches properly before remove the Volume PCB.

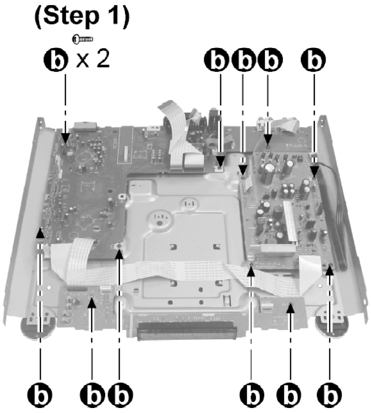

(Step 3)
Catches
Volume PCB

Step 4: Release all the catches properly before remove the Sensor PCB.


(Step 4)
Catches
Sensor PCB

11.11. Replacement of the Main, Panel, Power Supply and TV/VCR PCB

Step 1: Remove all the screws.

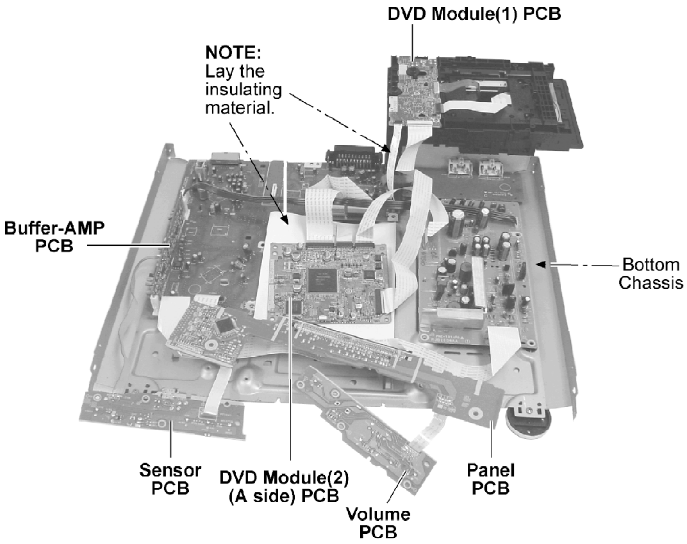


11.12. Checking the Panel PCB, DVD Module (1) PCB, DVD Module (2) PCB side A, Buffer-AMP PCB, Sensor PCB and Volume PCB

1. The Top Cabinet.

2. The Rear Panel.

3. Replacement of Tuner Pack Unit and Interface PCB.
4. The DVD Module (2) PCB and B/E Bracket A & B.
5. The DVD Mecha Unit.
6. The Front Panel.
7. Replacement of the Volume PCB and Sensor PCB.
8. Replacement of the Main, Panel, Power Supply and TV/VCR PCB.
9. Before checking please reconnect back all the connectors and FFC.

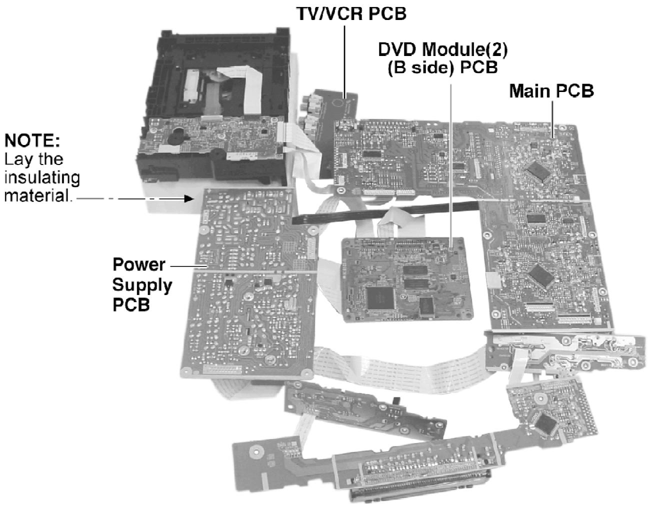

DVD Module(1) PCB
NOTE:
Lay the insulating material.
Buffer-AMP PCB
Bottom Chassis
Sensor PCB
DVD Module(2) (A side) PCB
Volume PCB
Panel PCB

11.13. Checking the Main, DVD Module (2) Side B, Power Supply and TV/VCR PCB

1. The Top Cabinet.
2. The Rear Panel.
3. Replacement of Tuner Pack Unit and Interface PCB.
4. The DVD Module (2) PCB and B/E Bracket A & B.
5. The DVD Mecha Unit.
6. The Front Panel.
7. Replacement of the Volume PCB and Sensor PCB.

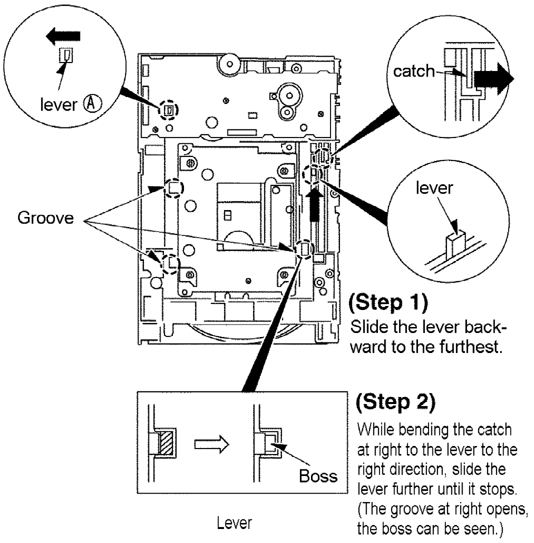
8. Replacement of the Main, Panel, Power Supply and TV/VCR PCB.

9. Before checking please reconnect back all the connectors and FFC.


TV/VCR PCB
DVD Module(2) (B side) PCB
Main PCB
NOTE: Lay the insulating material.
Power Supply PCB

11.14. Disassembly and Assembly Mechanism Unit

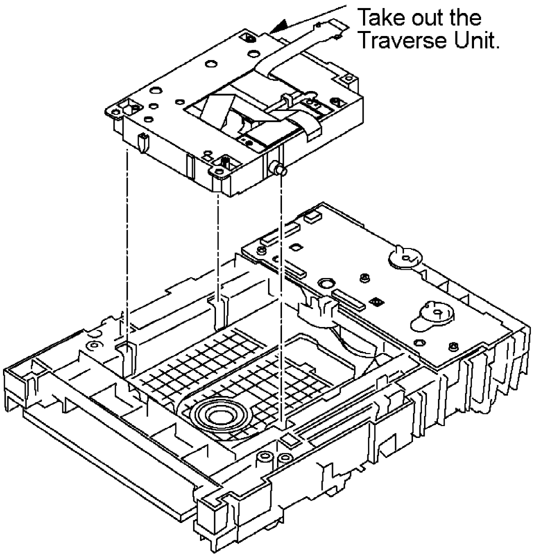
11.14.1. Replacement of Travers Unit.


lever Ⓐ
catch
lever
Groove
Boss
Lever

(Step 1)
Slide the lever backward to the furthest.

(Step 2)
While bending the catch at right to the lever to the right direction, slide the lever further until it stops. (The groove at right opens, the boss can be seen.)

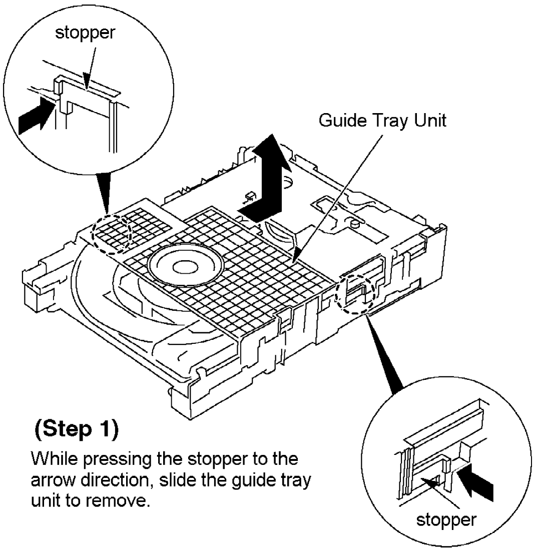
(Step 3)
Press lever Ⓐ to the left. (Two grooves at left open.)



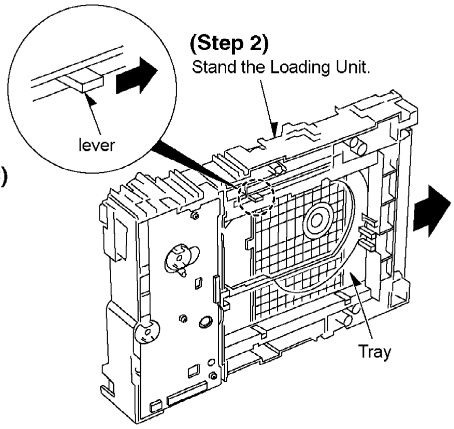
(Step 4)
Take out the Traverse Unit.

11.14.2. Replacement of Tray.

- Follow steps 1 to 4 described in Item 11.14.1.


stopper
Guide Tray Unit
stopper

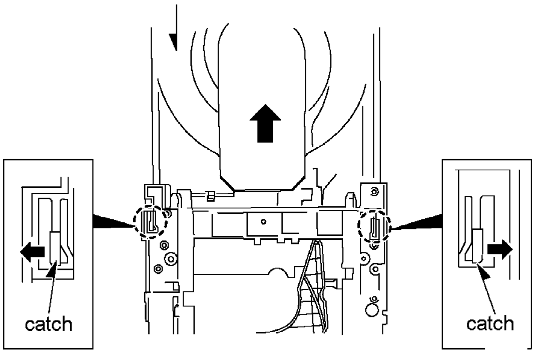
(Step 1)
While pressing the stopper to the arrow direction, slide the guide tray unit to remove.

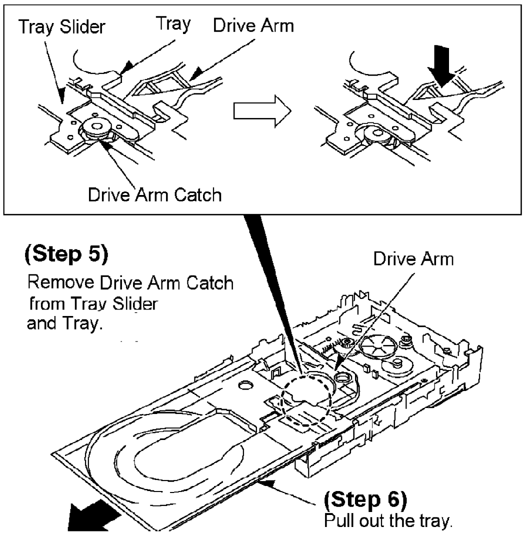


(Step 2)
Stand the Loading Unit.

(Step 3)

(Step 4)
Widen the catches at both sides and pull out the tray. (The tray will stop after a few slides)


catch
catch

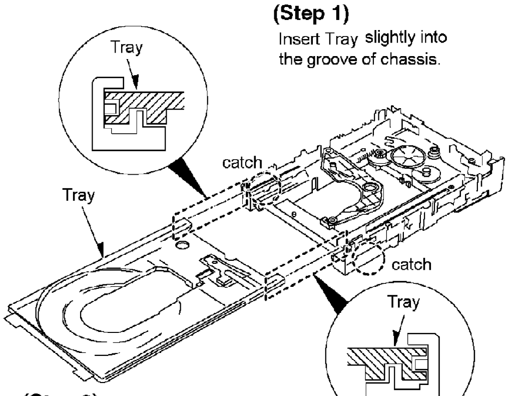

Tray Slider
Tray
Drive Arm
Drive Arm Catch
Drive Arm

(Step 5)
Remove Drive Arm Catch from Tray Slider and Tray.

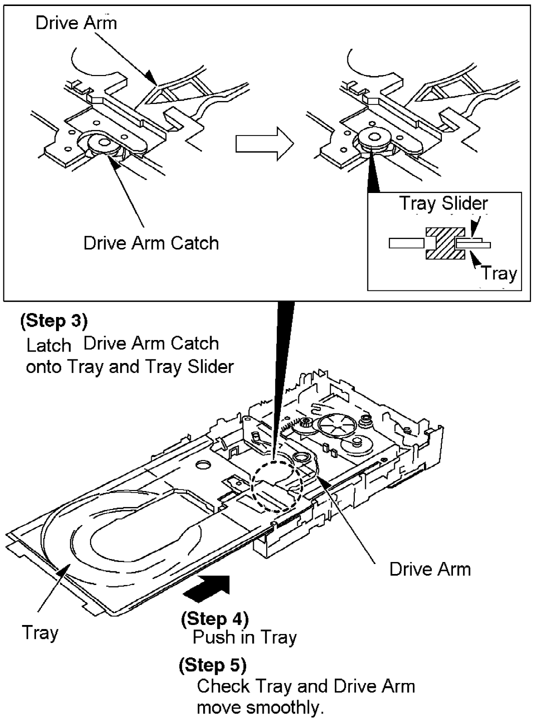
(Step 6)
Pull out the tray.

Fixture the Tray

(Step 1)
Insert Tray slightly into the groove of chassis.


Tray
catch
Tray
catch
Tray

(Step 2)
Insert Tray into the area to avoid catching the mechanism chassis claw


Drive Arm
Drive Arm Catch
Tray Slider
Tray
Drive Arm
Tray

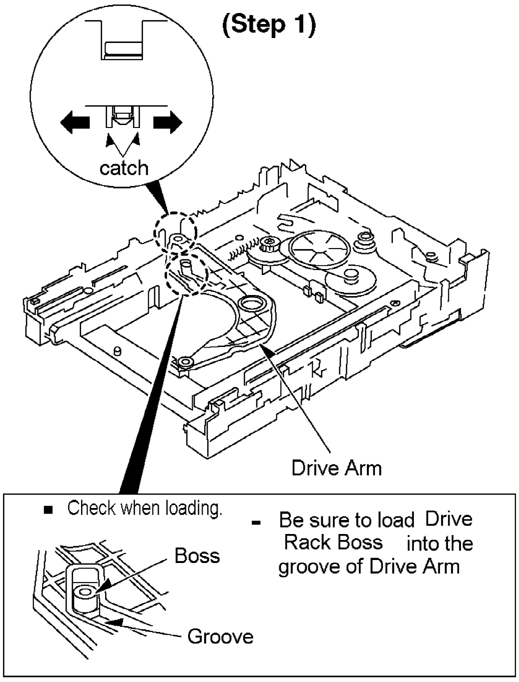
(Step 3)
Latch Drive Arm Catch onto Tray and Tray Slider

(Step 4)
Push in Tray

(Step 5)
Check Tray and Drive Arm move smoothly.

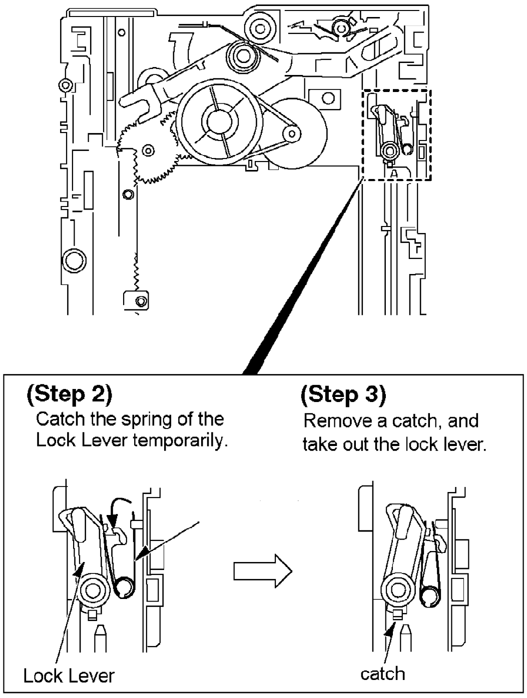
11.14.3. Disassembly of loading section.

- **Follow Steps 1 to 4 described in Item 11.14.1.**
- **Follow Steps 1 to 6 described in Item 11.14.2.**


catch
Drive Arm
Boss
Groove

(Step 1)

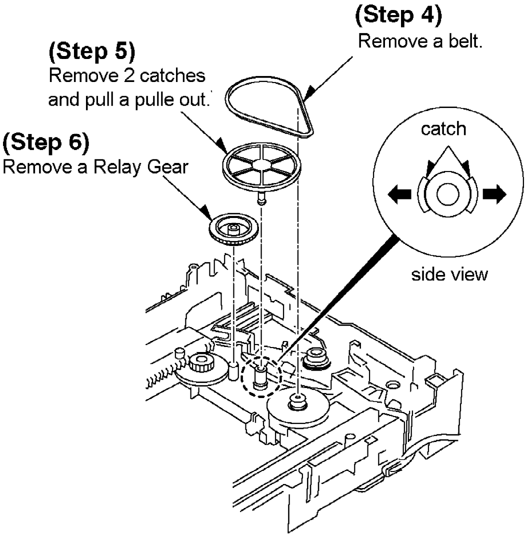
- Check when loading.
- Be sure to load Drive Rack Boss into the groove of Drive Arm



(Step 2)
Catch the spring of the Lock Lever temporarily.

(Step 3)
Remove a catch, and take out the lock lever.

Lock Lever
catch

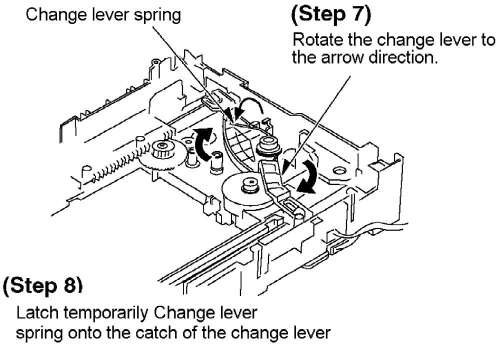


(Step 4)
Remove a belt.

(Step 5)
Remove 2 catches and pull a pulle out.

(Step 6)
Remove a Relay Gear

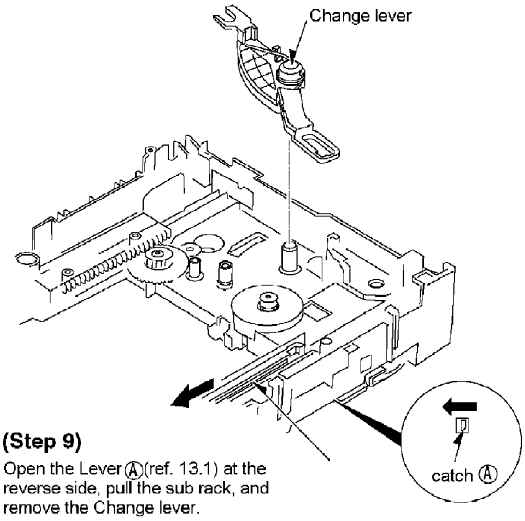
catch
side view



Change lever spring

(Step 7)
Rotate the change lever to the arrow direction.

(Step 8)
Latch temporarily Change lever spring onto the catch of the change lever


Change lever
catch Ⓐ

(Step 9)

Open the Lever Ⓐ(ref. 13.1) at the reverse side, pull the sub rack, and remove the Change lever.

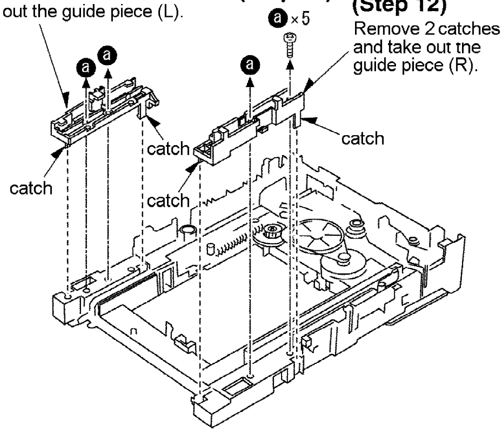
(Step 11)

Remove 2 cathes and take out the guide piece (L).

(Step 10)

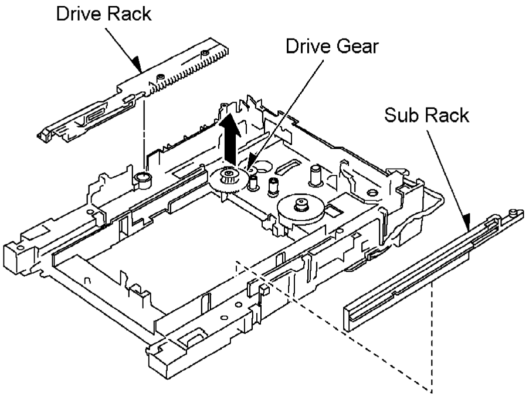
(Step 12)

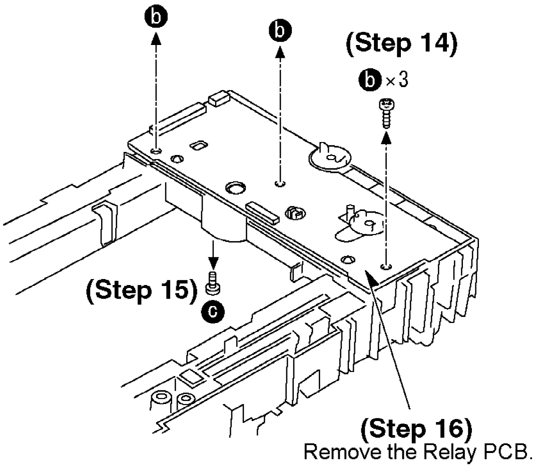
Remove 2 catches and take out the guide piece (R).


ⓐ×5
ⓐ
ⓐ
ⓐ
catch
catch
catch
catch

(Step 13)

Remove the drive rack, the drive gear and the sub rack.


Drive Rack
Drive Gear
Sub Rack

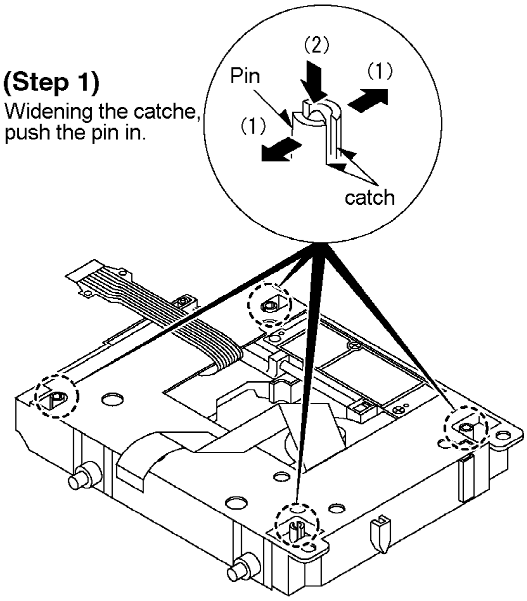

b
b
(Step 14)
b ×3
(Step 15)
c
(Step 16)
Remove the Relay PCB.

11.14.4. Replacement of optical Pickup Unit

- Follow Steps 1 to 4 described in Item 11.14.1.

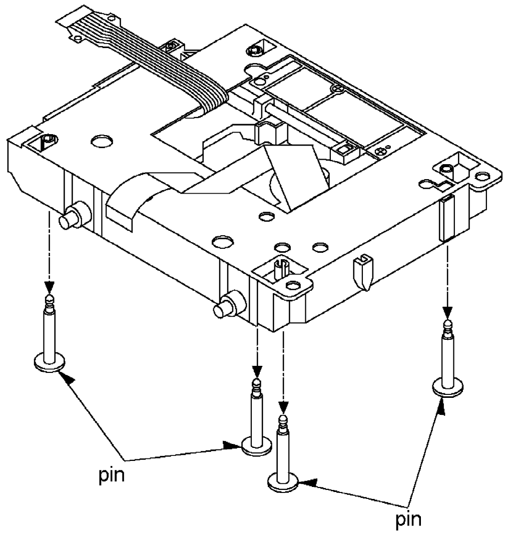
- Follow Steps 1 to 6 described in Item 11.14.2.

- Follow Steps 1 to 16 described in Item 11.14.3.


(Step 1)
Widening the catche,
push the pin in.
(2)
Pin
(1)
(1)
catch

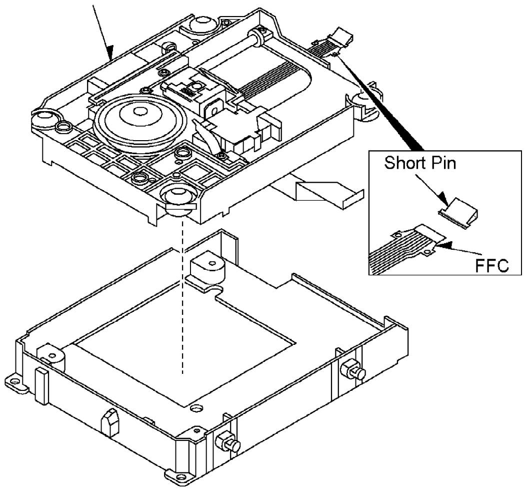
(Step 2)

Remove 4 pins.



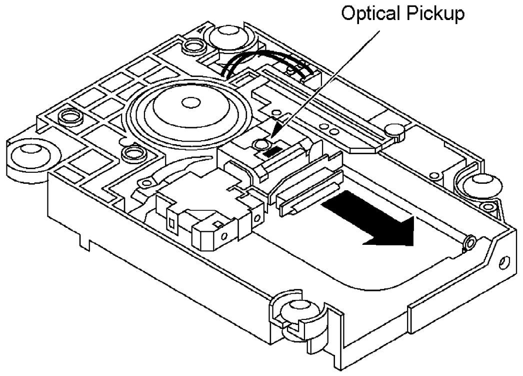
(Step 3)

Remove the Traverse Deck Unit.

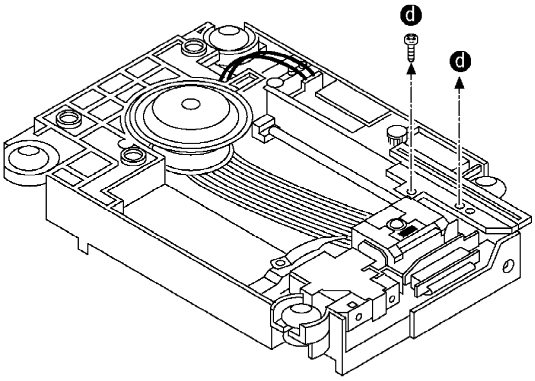

Short Pin
FFC

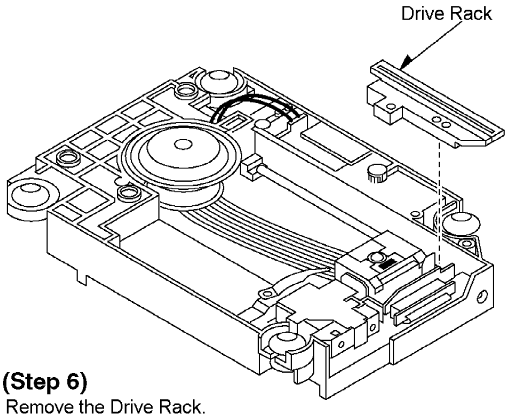
Note:
Insert a short pin into FFC of the optical pickup.
[See “Notice on handling of the optical pickup”]

(Step 4)
Shift the Optical Pickup to
the furthest backward.

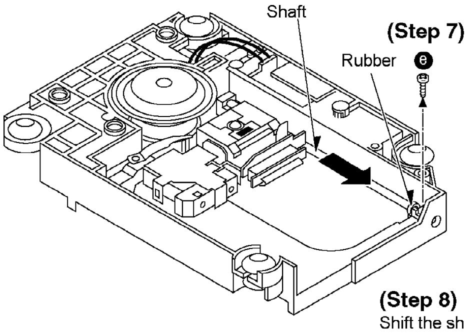

Optical Pickup

(Step 5)



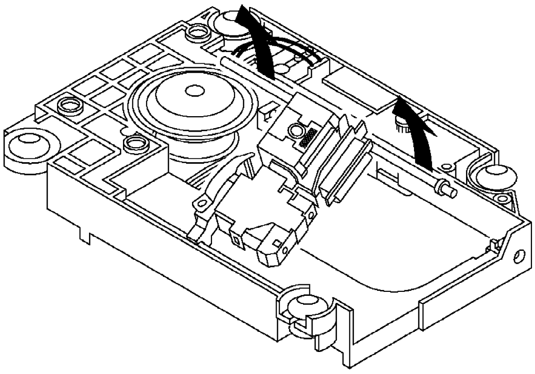


(Step 6)
Remove the Drive Rack.

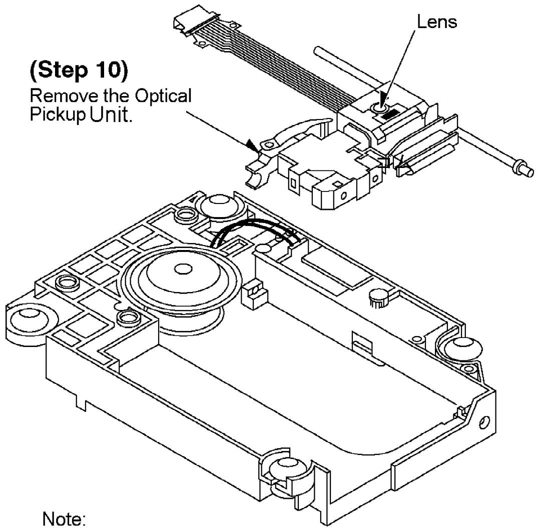

Shaft
Rubber
ⓔ

(Step 7)

(Step 8)
Shift the shaft to
the arrow direction.

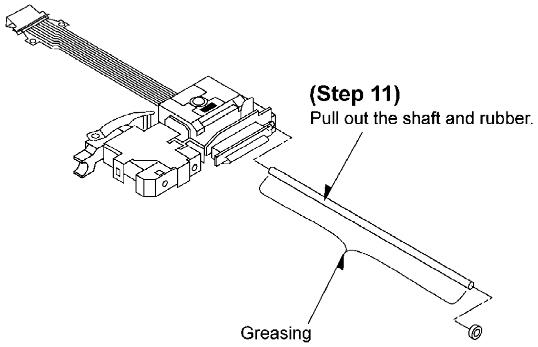


(Step 9)
Lift the Optical Pickup Unit with shaft.



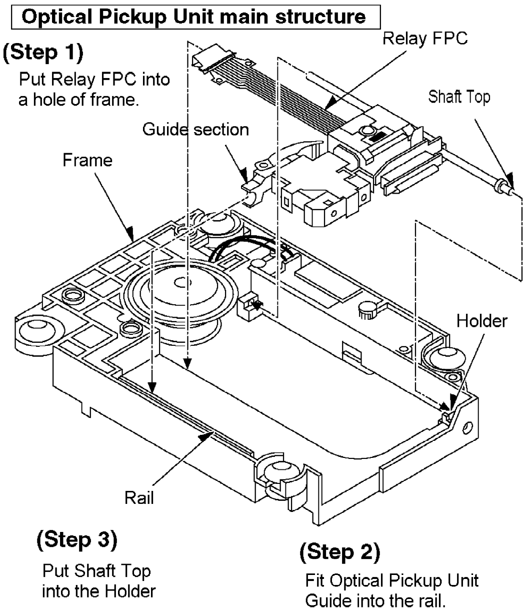
(Step 10)
Remove the Optical Pickup Unit.

Note:
1. Do not subject optical pickup to static electricity as it is extremely sensitive to electrical shock.



(Step 11)
Pull out the shaft and rubber.

Greasing
(Grease No.: RZGGP662)



Optical Pickup Unit main structure

(Step 1) Put Relay FPC into a hole of frame.

(Step 2) Fit Optical Pickup Unit Guide into the rail.

(Step 3) Put Shaft Top into the Holder

Relay FPC
Shaft Top
Guide section
Frame
Holder
Rail

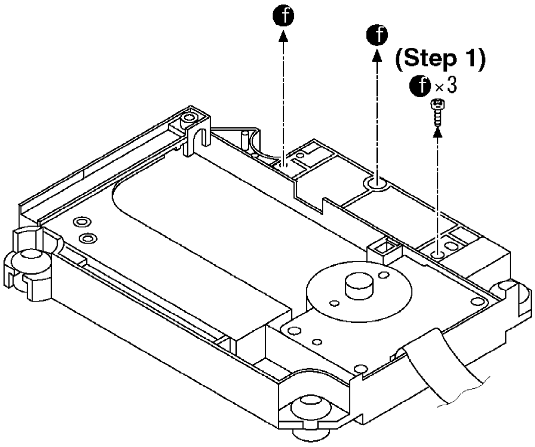
11.14.5. Disassembly of traverse motor (Unit) and spindle motor (Unit).

- Follow Steps 1 to 4 described in Item 11.14.1.

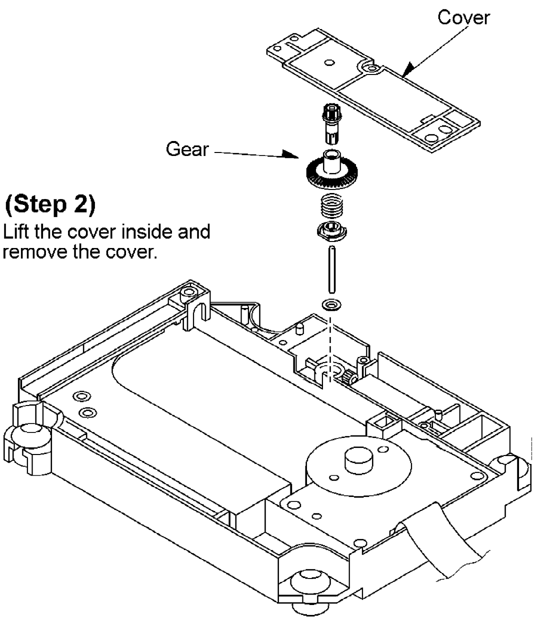
- Follow Steps 1 to 6 described in Item 11.14.2.

- Follow Steps 1 to 16 described in Item 11.14.3.

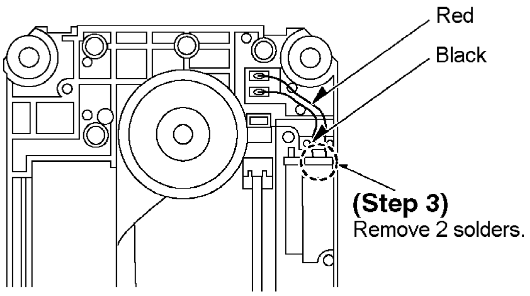
- Follow Steps 1 to 11 described in Item 11.14.4.



(Step 1)

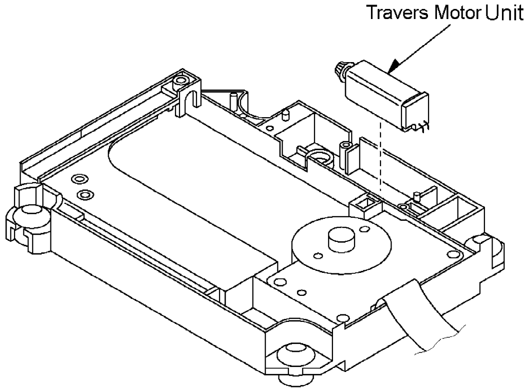


(Step 2)
Lift the cover inside and remove the cover.

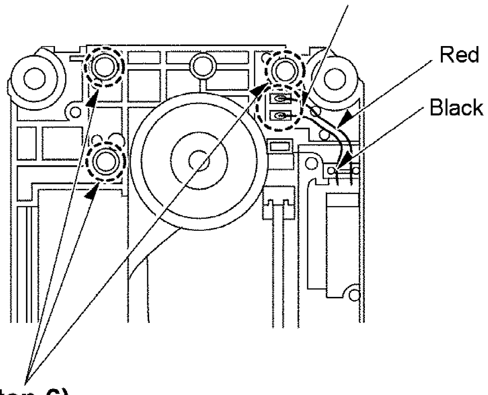


(Step 3)
Remove 2 solders.

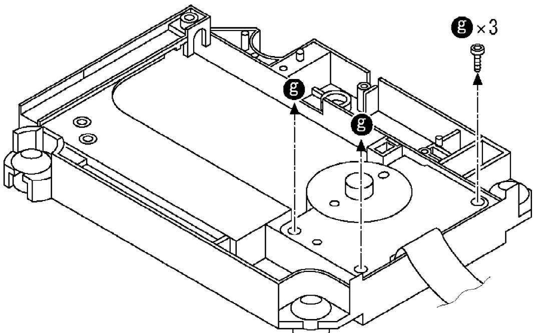
(Step 4)
Remove the Traverse Motor Unit.


Travers Motor Unit

(Step 5)
Remove 2 solders.

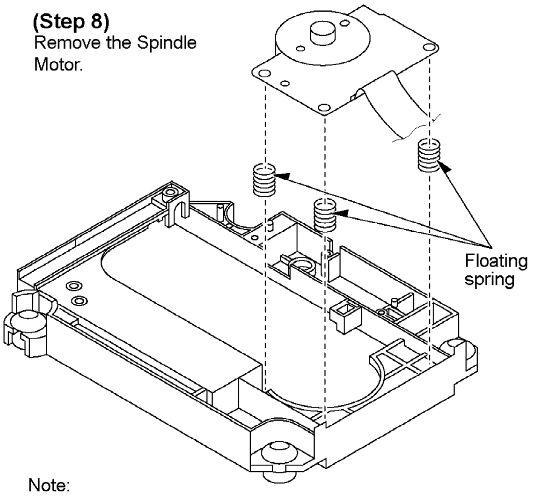


(Step 6)
Remove 3 screw locks thoroughly.



(Step 7)
Remove ⓖ(3 pieces) with 1.8mm slotted screwdriver.

(Step 8)
Remove the Spindle Motor.



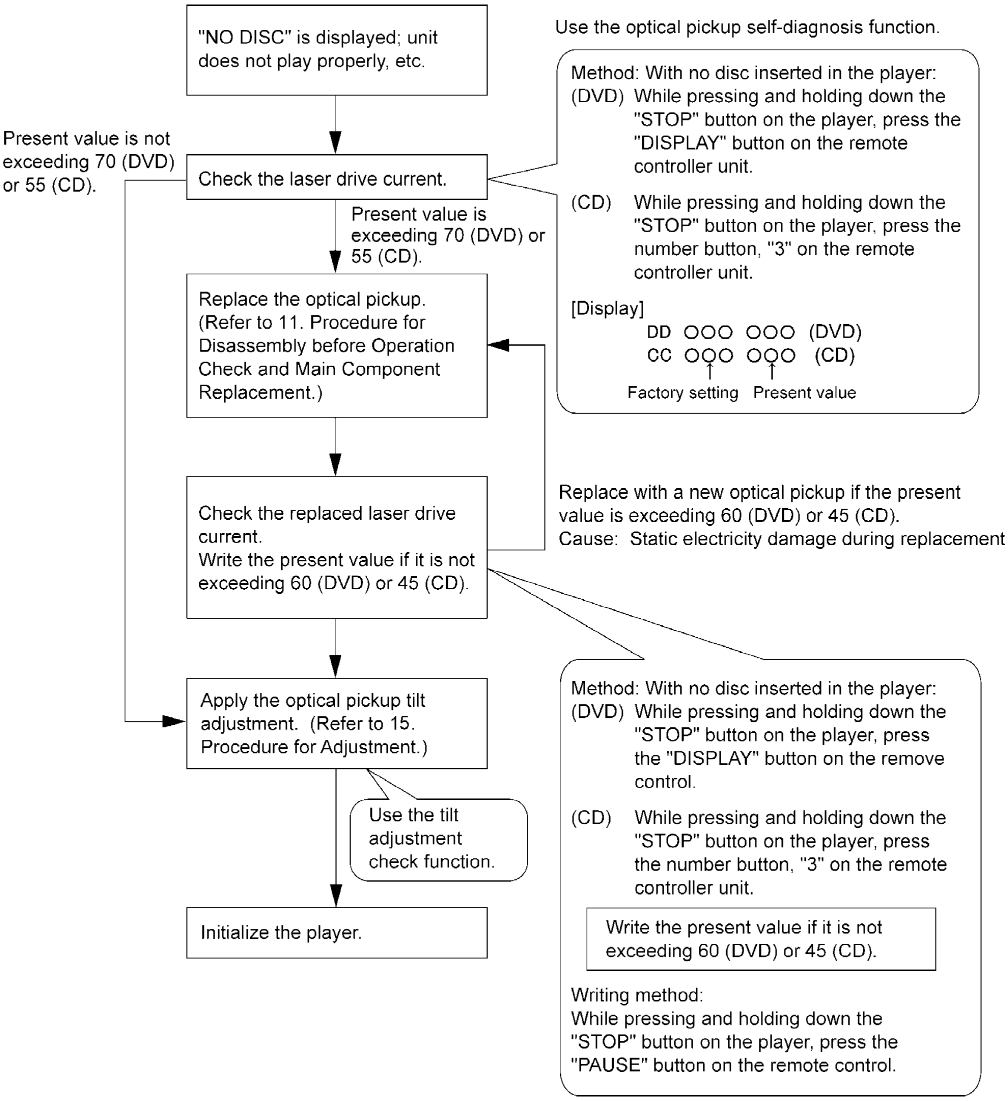
Note:
As floating springs (3 pieces) come off at the same time, be careful not to lose them.

12. Optical Pickup Self-Diagnosis and Replacement Procedure

12.1. Self-diagnosis

This unit is equipped with the optical pickup self-diagnosis function and the tilt adjustment check function. Follow the procedure described below during repair in order to perform self-diagnosis and tilt adjustment effectively. Especially when “NO DISC” is displayed, be sure to apply the self-diagnosis function before replacing with an optical pickup. Replacement of optical pickup generally requires when the present value of laser drive exceeds 70 (DVD) or 55 (CD).

Note:
Start diagnosis within three minutes after turning on the power (as diagnosis fails when the unit becomes warm).



"NO DISC" is displayed; unit does not play properly, etc.

Check the laser drive current.

Present value is not exceeding 70 (DVD) or 55 (CD).

Present value is exceeding 70 (DVD) or 55 (CD).

Use the optical pickup self-diagnosis function.

Method: With no disc inserted in the player:
(DVD) While pressing and holding down the "STOP" button on the player, press the "DISPLAY" button on the remote controller unit.
(CD) While pressing and holding down the "STOP" button on the player, press the number button, "3" on the remote controller unit.

[Display]
DD OOO OOO (DVD)
CC OOO OOO (CD)
Factory setting Present value

Replace the optical pickup. (Refer to 11. Procedure for Disassembly before Operation Check and Main Component Replacement.)

Check the replaced laser drive current.
Write the present value if it is not exceeding 60 (DVD) or 45 (CD).

Replace with a new optical pickup if the present value is exceeding 60 (DVD) or 45 (CD).
Cause: Static electricity damage during replacement

Method: With no disc inserted in the player:
(DVD) While pressing and holding down the "STOP" button on the player, press the "DISPLAY" button on the remove control.
(CD) While pressing and holding down the "STOP" button on the player, press the number button, "3" on the remote controller unit.

Write the present value if it is not exceeding 60 (DVD) or 45 (CD).

Writing method:
While pressing and holding down the "STOP" button on the player, press the "PAUSE" button on the remote control.

Apply the optical pickup tilt adjustment. (Refer to 15. Procedure for Adjustment.)

Use the tilt adjustment check function.

Initialize the player.

12.2. Cautions to Be Taken During Replacement of Optical Pickup and Spindle Motor

Before replacing the optical pickup and spindle motor, check a total usage time respectively. Follow the checking method described below.

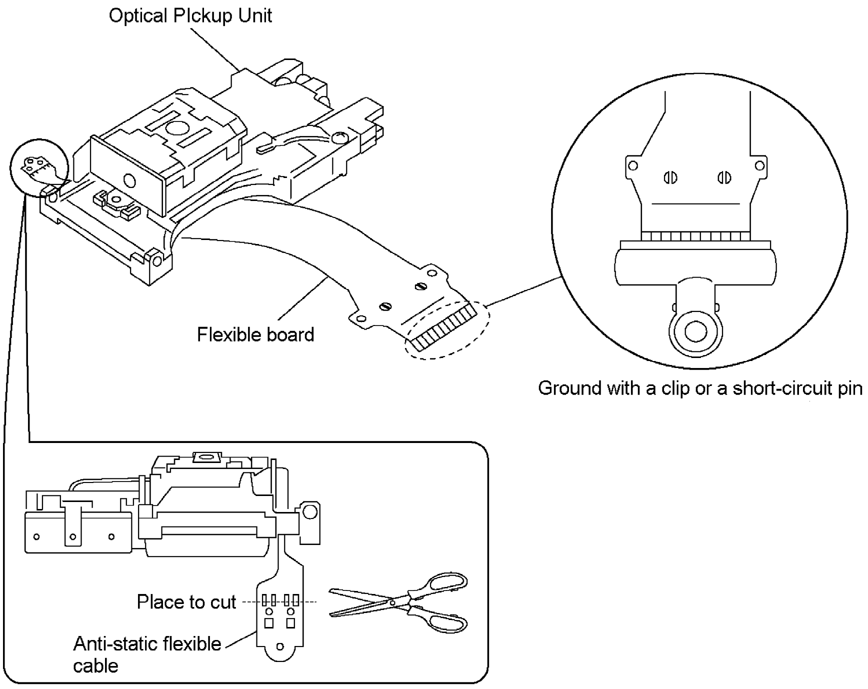
Item	Status and Key Function	Display
Checking DVD, CD laser usage time	With the unit stopped and no disc inserted, press the. ■ button on the player and the ▲ button on the remote controller unit.	_xxxx_yyyy / xxxx(DVD), yyy total time is displayed with a digit number by the ten hour
Checking spindle motor usage time	With the unit stopped and no disc inserted, press the ■ button on the player and the ▶ button on the remote controller unit.	___T2_xxxx / xxxx: total time displayed with a four-digit nu the ten hours.
Resetting DVD, CD laser usage time	While the DVD and CD laser usage times are displayed, press the ■ button on the player and the ▼ button on the remote controller unit.	_0000_0000
Resetting spindle motor usage time	While the spindle motor usage time is displayed, press the ■ button on the player and the ◀ button on the remote controller unit.	___T2_0000

12.2.1. Cautions to be taken during replacement of optical pickup

Optical pickup could be damaged due to the static electricity discharged from human body. Wear proper protection gear against static electricity during optical pickup and its peripheral repair. (Refer to “Cautions to Be Taken When Handling Optical Pickup”.)

- Do not touch laser diode, actuator and their peripherals.
- Do not check laser diode with a tester and such. (The tester will be destroyed.)
- For short-circuiting or removing laser diode, the use of an anti-static soldering iron is recommended. (Recommended model: HAKKO ESD product)
- Solder the land of the flexible cable in the optical pickup.

Note:
If an anti-static soldering iron is not available, short-circuit the terminal surface of the flexible cable and then the land using a clip or equivalent device.


Optical PIckup Unit
Flexible board
Ground with a clip or a short-circuit pin
Place to cut
Anti-static flexible cable

13. Self-Diagnosis Function

This unit is equipped with the self-diagnosis function, which displays an error when it occurs, for use during servicing.

13.1. Automatic Displayed Error / Codes

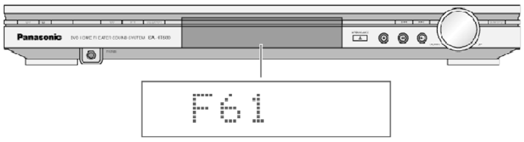
13.1.1. Automatic Display Function

For a power unit error, the code is automatically displayed.

F61:

Automatically displayed on the LCD of the player.

Fig. 13-1


Panasonic
F61

13.1.2. Re-Display

- **For F61 Display**
- **When the code, F61 is displayed, the power is automatically turned off.**
- **The code, F61 is displayed for three seconds, and then the current time appears.**
- **To retrieve the code, turn on the power button so that the code F61 appears, however, is switched to time display after three seconds,**

and the power is automatically turned off.

13.1.3. Description of Error Code

13.1.3.1. F61

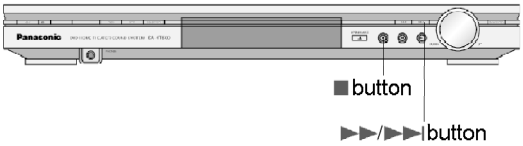
- State, Condition
  When the power is turned on, the unit is automatically turned off. The power does not turn on.
- Cause, Troubleshooting
  Power circuit system failure and/or direct current flown to speaker terminal / Identify the cause and replace with new parts.

13.2. Memorized Error Codes

13.2.1. Activating Self-Diagnosis Function and Displaying Method

1. Turn on the power.
2. Select DVD/CD function. With no DVD/CD inserted in the player, press and hold down the ■ button for at least two seconds, and press the F_SKIP ▶▶| button for at least two seconds in order to display “T____________”.
3. Press the ■ button. If a memorized error is detected, the result of self diagnosis is displayed. (Ex.: T H15) (See table below) / If several errors are detected, press the ■ button to display each.

Fig. 13-2



13.2.2. Re-Display

- Press the power button to turn off the power, and then turn on the power.
- The details of self diagnosis are stored in the unit memory. / To retrieve them, follow the procedure described the above, “Activating Self-Diagnosis Function and Displaying Method”.

13.2.3. Deleting Details of Self Diagnosis

- After repair, press and hold down the ■ button for at least five seconds, “T___ --- __” appears for a second and then “T________” appears. (Deleting the details of self diagnosis)

- After repairing errors, be sure to delete the details of self diagnosis.

Table

Error Code	State, Conditon	Cause, Troubleshooting
H15	The disc tray cannot be opened: it closes spontaneously.	Disc tray open/close detection switch (S failure. / (Check and replace)
H16	The disc tray cannot be closed: it opens spontaneously.	

13.3. Mode Table 1

Following modes are available with combinations of the pressed buttons on the player and on the remote controller unit.

Player	Remote controller unit	Usage
■ button	0	Error code display (Refer to the item, 13.4. DVD Error Code Des
	5	Tilt adjustment
	6	Area number and broadcasting system check
	7	Built-in program version check
	DISPLAY	DVD laser drive current check
	3	CD laser drive current check
	PAUSE	Writing of laser drive current value after replacement of optical (Do use this function only when optical pickup is replaced.)
	≧10	Initialization of the player (factory setting is restored.) / Used af replacement of micro-computer and its peripherals and printed board.

13.4. DVD/CD Self-Diagnosis Error Code Description

Error Code	Meaning	Details
U. H. Error		
U11	**Focus servo failure**	
H01	**Tray loading failure**	
H02	**Spindle servo failure**	**(Spindle servo, DSC, SP motor, CLV servo fai**
H03	**Traverse motor failure**	
H04	**Tracking servo error**	
H05	**Seek timeout failure**	
DSC system		
F500	**DSC failure**	**DSC stops due to servo failure. / (Startup, foc etc.)**
F501	**DSC not Ready failure**	**Communication failure between DSC and sys computer / (No communication because DSC move)**
F502	**DSC Time out failure**	**See F500.**
F503	**DSC communication failure**	**Communication failure (Result failure occurs communication command is transmitted.)**
F505	**DSC Attention Error**	**See F500.**
F506	**Invalid media**	**Disc is placed upside down; TOC is unreadab invalid disc is inserted.**
ODC system		
F600	**Unable to obtain control information due to form recovery failure**	**Operation stops because navigation data can obtained due to form recovery system failure.**
F601	**Illegal sector ID requested**	**Operation stops because access of illegal ID requested.**
F602	**Unable to obtain LEAD IN due to form recovery failure**	**Unable to read LEAD IN data**
F603	**Unable to obtain KEY DET due to form recovery failure**	**Unable to obtain CSS data**
F610	**ODC failure**	**No permission of command issue**
F611	**No CRC OK appearing for a certain time**	**Unable to obtain seek address at CD system**
F612	**No CRC OK appearing for a certain time**	**Unable to obtain ID data at DVD system**
Disc Code		
F103	**Ilegal highlight position**	**Disc standard is possibly illegal when highlig displayed.**
IIC Error		
F4FF	**Forced initialization failure (Time out)**	
Micro-computer Error		
F700	**MBX overflow**	**When replying a message to Disc Manager**
F701	**Unable to complete a message command**	**A message is issued before replying to Disc**
F702	**Change in a message command**	**A message is issued before replying to Disc**
F880	**Unsuitable task number**	**When a message arrives from not existing tas**

Error Code	Meaning	Details
F890	A message is sent during AV task transmission	During transmission of a message to AV task
F891	Unable to transmit a message to AV task	When transmission of a message to AV task
F893	FROM altered	
F894	EEPROM failure	
F8A0	Unsuitable message command	When transmission of a message to AV task

13.5. Error Codes Stored During No Play

Error Code	Meaning	System Computer Item	Setting Task	Internal system
F0BF	6) Unable to replay due to physical layer identification failure	PCND_NOPLAY_ / PHYSICAL 0x50	Drive / Manager	0xD0BF
F0C0	8) DVD: Unable to replay due to no DVD Video/Audio/VR	PCND_NOPLAY_ / VIDEO 0x70	Disc / Manager	0xD0C0
F0C1	9) DVD: Prohibited due to illegal regional code	PCND_NOPLAY_ / RCD 0x80	Disc / Manager	0xD0C1
F0C2	A) DVD: No replay due to PAL system	PCND_NOPLAY_ / PAL 0x90	Disc / Manager	0xD0C2
F0C3	B) DVD: All title replay prohibited in parental setting	PCND_NOPLAY_ / PTL 0xA0	Disc / Manager	0xD0C3
F0C4	C) VCD: Prohibited due to PHOTO CD format	PCND_NOPLAY_ / PHOTOCD 0xB0	Disc / Manager	0xD0C4
F0C5	D) VCD/CD: Prohibited due to CD-ROM without CD-DA	PCND_NOPLAY_ / CDROM 0xC0	Disc / Manager	0xD0C5

13.6. Mode Table 2

Following modes are available with combinations of the pressed buttons on the player and on the remote controller unit.

Item	Operational Condition and Key Function	Details	Display	To
Jitter display	**While the player is stopped and no disc is inserted, press and hold down the ■ button on the player and the number button, "5" on the remote controller unit.**	**Jitter display / Measures and displays jitter. Measurement is repeated every second. Read error counter starts at 0 at the mode setting, and increased by one as data read fails at target block. A small defect is allowed to correct by retry. Any possibility is counted as one increment. Repetitive errors after retry increase by two levels or more.**	**J*1 xxx*2 _yyy*3 _zz*4 / / *1 : Jitter display mode / *2 : Jitter measurement value / *3 : Read error counter / *4 : Focus driving value** **Values are shown to one decimal place in the decimal digit.Focus driving value is displayed in the hexadecimal digit.**	**Pre ST OP**
Error code display	**While the player is stopped and no disc is inserted, press and hold down the ■ button on the player and the number button, "0" on the remote controller unit.**	**Error code display / Displays the latest error code stored in EEPROM.**	**DVDnn_F--- / *nn: Error history / *--: Error number**	**Aut exit mo five**
Measurement of laser current electricity initialization value	**While the player is stopped and no disc is inserted, press and hold down the ■ button on the player and the ❚❚ button on the remote controller unit.**	**Measurement of laser current electricity initialization value / Memorizes each initialization value of DVD and CD in EEPROM.**	**DO*1 _034*2 _028*3 / / *1 : Laser current electricity measurement mode / *2 : DVD current electricity value / *3 : CD current electricity value** **Values are shown in the decimal digit. The above example indicates that the current electricity initialization value is 34mA at DVD laser and 28mA at CD laser when laser is turned on.**	**Aut exit mo five**

Item	Operational Condition and Key Function	Details	Display	To
Measurement of DVD laser current electricity	While the player is stopped and no disc is inserted, press and hold down the ■ button on the player and the DISPLAY button on the remote controller unit.	Measurement of DVD laser current electricity / Measures DVD laser current electricity and displays the result together with the initialization value stored in EEPROM. After measurement, DVD laser is lit till the power is turned off (or goes off when the primary power is turned off).	DD*1 _034*2 _032*3 / / *1 : DVD laser current electricity measurement mode / *2 : Current electricity initialization value stored in EEPROM / *3 : Present value of current electricity Values are shown in the decimal digit. The above example indicates that the current electricity initialization value is 34mA and its present value is 32mA.	Aut exit mo five
ADSC internal RAM display	While the player is stopped and no disc is inserted, press and hold down the ■ button on the player and the number button "1" or "2" on the remote controller unit.	ADSC internal RAM display / Reads and displays the RAM value inside ADSC. The address is renewed when the CLEAR key is pressed so that the values at eleven points appear.	A*1 _0FA*2 _6901*3 / / *1 : ADSC internal RAM display mode / *2 : Address / *3 : RAM value at displayed address Values are shown in the hexadecimal digit. The above example indicates that ADSC value at the address, 0FAh is 6901h.	Pre ST OP
Measurement of CD laser current electricity	While the player is stopped and no disc is inserted, press and hold down the ■ button on the player and the number button "3" on the remote controller unit.	Measurement of CD laser current electricity / Measures CD laser current electricity and displays the result together with the initialization value stored in EEPROM. After measurement, CD laser is lit till the power is turned off (or goes off when the primary power is turned off).	DC*1 _028*2 _026*3 / / *1 : CD laser current electricity measurement mode / *2 : Current electricity initialization value stored in EEPROM / *3 : Present value of current electricity Values are shown in the decimal digit. The above example indicates the current electricity initialization value is 28mA and its present value is 26mA when laser is turned on.	Aut exit mo five

Item	Operational Condition and Key Function	Details	Display	To
User initialization	While the player is stopped and no disc is inserted, press and hold down the ■ button on the player and the number button ≧10 on the remote controller unit.	User initialization / The user setting recovers the factory setting.	“INITIALIZED”	Nor
Region display	While the player is stopped and no disc is inserted, press and hold down the ■ button on the player and the number button, “6” on the remote controller unit.	Region display	__w*1 _x*2 y*3 _zzz*4 / / *1 : Region number / *2 : N; no PAL /P; PAL / *3 : N; NTSC/6; PAL60 / *4 : Panel computer jumper information	Aut exit mo five
Firm version display	While the player is stopped and no disc is inserted, press and hold down the ■ button on the player and the number button, “7” on the remote controller unit.	Firm version display	rrr*1 _xx*2 y*3 zzz*4 / / *1 : Panel computer release number / *2 : System computer generation / *3 : System computer model type / *4 : System computer release number	Aut exit mo five

Item	Operational Condition and Key Function	Details	Display	To
Region and firm version display	**While the player is stopped and no disc is inserted, press and hold down the ■ button on the player and the number button, “8” on the remote controller unit.**	**Region and firm version display**	**_r*1 __xx*2 y*3 zzz*4 / / *1 : Region number / *2 : System computer generation / *3 : System computer model type / *4 : System computer release number**	**Aut exit mo five**
Usage time 1	**While the player is stopped and no disc is inserted, press and hold down the ■ button on the player and the ▲ button on the remote controller unit.**	**Usage time 1 / Laser usage time / Measures each for DVD and CD respectively.**	**_1234_5678 / / The numbers in the left show usage time for DVD laser and those in the right for CD laser. The four-digit number is shown by the ten hours in the decimal digit. The number after 0000 is 9999.**	**Aut exit mo five**
Usage time 1 reset	**While the usage time 1 is displayed, press and hold down the ■ button on the player and the ▼ button on the remote controller unit.**	**Usage time 1 reset / Laser usage time‘ / Resets both for DVD and CD at once.**	**_0000_0000**	**Aut exit mo five**

Item	Operational Condition and Key Function	Details	Display	To
Usage time 2	While the player is stopped and no disc is inserted, press and hold down the ■ button on the player and the ▶ button on the remote controller unit.	Usage time 2 / Spindle motor usage time	___T2_1234 / / The four-digit number is shown by the ten hours in the decimal digit. The number after 0000 is 9999.	Aut exit mo five
Usage time 2 reset	While the usage time 2 is displayed, press and hold down the ■ button on the player and the ◀ button on the remote controller unit.	Usage time 2 reset / Spindle motor usage time	____T2_0000	Aut exit mo five
Communication error display /	While the player is stopped and no disc is inserted, press and hold down the ■ button on the player and the MENU button on the remote controller unit.	Displays frequency of communication errors between system computer firm IC and mechanical computer IC during DVD module.	ERR_00_/30	Aut exit mo five

13.7. Lock Function

This function prohibits removal of disc and some disc operations to prevent loss of disc at a shop during sales promotion or equivalent occasions. / While this function is activated, the player displays "___LOCKED_" if any button is touched. / The lock function can be used in two ways.

13.7.1. Setting

- LOCK MODE A/LOCK MODE B

1. **While the player is set to SELECTOR DVD/CD and POWER ON, press and hold down the ■ button on the player and the [POWER] button on the remote controller for at least three seconds so that the player displays "___LOCKED_" for three seconds to indicate that LOCK MODE A is activated and the currently loaded disc is played.**
2. **The following button is invalid during LOCK MODE A. OPEN/CLOSE ⏏ button are invalid and the player displays "___LOCKED_" while the lock function mode is entered.**
3. **While LOCK MODE A is activated and the player is locked, press and hold down the ■ button on the player and the [POWER] button on the remote controller for at least three seconds so that the player displays "_UNLOCKED_" to indicate the function is deactivated.**
4. **While the player is set to SELECTOR DVD/CD and POWER ON, press and hold down the ▶ button on the player and the [POWER] button on the remote controller for at least three seconds so that the player displays "___LOCKED_" for three seconds to indicate that LOCK MODE B is activated and the currently loaded disc in played.**
5. **The following buttons are invalid, based on the "selector or disc related", during LOCK MODE B.**

Player	**⏏, ■, ❚❚, SELECTOR, ▶▶|, |◀◀, VOL. JOG**
Remote controller unit	**SLEEP, REPEAT, D.MIX (REPEAT holding down), 0~9, ≧10 ,RETURN, FL DISPLAY, TEST (FL DISPLAY holding down), DISPLAY, SCREEN, CH SELECT, ■, ❚❚, |◀◀, ▶▶|, ◀◀, ▶▶, SET UP, GROUP, MUTING, P MEMORY, TUNER/BAND, TV, VCR/AUX**

6. The keys prohibited during PLAY and LOCK MODE B need not to correspond each other. The keys related to sound quality and shown on the DVD screen are not prohibited. Following buttons are always valid:

Player	POWER, DVD/CD>, PROGRESSIVE, VOL. JOG
Remote controller unit	POWER, PLAY MODE, CANCEL, SFC, B. B LEVEL, VOL-, VOL+, DVD/CD>, MENU, TOP MENU, ◀, ▶, ▲, ▼, ENTER, DPL, SSS,C.F, CSM, ZOOM

7. While LOCK MODE B is activated and the player is locked, press and hold down the ▶ button on the player and the [POWER] button on the remote controller for at least three seconds so that the player displays "_UNLOCKED_" for three seconds to indicate that the function is deactivated.
8. The tray lock function is deactivated by "AC Prohibition".
9. LOCK MODE A or B is an exclusive control over whichever is activated first.
10. While the player is set to a lock mode and POWER OFF, the auto power on function can be controlled by the DVD/CD button on the remote controller. The auto power on function is invalid by the other selector buttons (such as TUNER/BAND button).
11. While a lock mode is turned on and the prohibition button is pressed, "___LOCKED_" appears on FL.
12. While a lock mode is turned on and set to POWER OFF, the OPEN/CLOSE button is invalid to control the auto power on function.

13.8. Things to Do After Repair

Follow the procedure described below after repair.

1. While the power is on, press the ⏏ button to close the tray.
2. Press the power button to turn off the power.
3. Unplug the power cable.

Note:
It is prohibited to unplug the power cable while the tray is opened and to close the tray manually.

14. Cautions To Be Taken During Servicing

14.1. Recovery Process after Repair of DVD Player

- Recovery disc (product number=RFKZD5TR006)

Note:

Previously required initialization after repair of DVD player is no longer necessary. After completing the recovery process, the user’s setting is replaced with factory setting like user initialization. Therefore, record the user’s setting before repair in order to restore it after applying the recovery process.

14.2. DVD Player Firmware Version Upgrade Process

Firmware of DVD player may upgrade to conform to improvement of its performance and quality including operational range, playability of non-standardized discs, etc. The version upgrade disc contains the recovery function, and the recovery disc is not necessary.

Note:

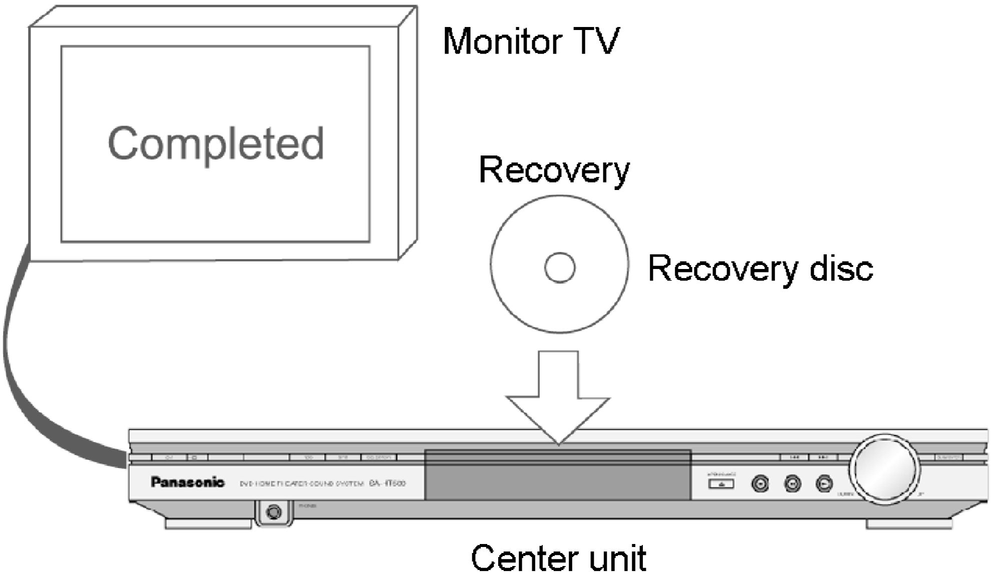
Version upgrade process cannot be complete if the AC power is cut off due to power failure and other occasions during the process. If this occurs, replace FROM and restart version upgrade. Version upgrade disc number is informed when ordered.

14.3. Firmware Version Upgrade Process by Using Disc and Recovery Process

- Recovery process

- Firmware version upgrade process

Both of the above procedures automatically start when the recovery disc is replayed.General CD -R disc allows version upgrade process and recovery process, making version upgrade through disc simple. / Recovery process: Optimization process of player after replacement of FLASH ROM, EEPROM, or module circuit board (DVD MODULE (2)) / Version upgrade process: Renewal of firmware for improvement of operational range and performance



14.3.1. Self-Diagnosis Function

- Total usage time display (spindle motor, DVD/CD laser)

- ADSC internal RAM display

- Others: Last error count......20 items

Efficiency of failure diagnosis is expected to improve by using the above functions together with the repair process.

[Purpose of Use]
Total usage time display: used for estimating a failure due to exhausted spindle motor, laser, or other parts.
ADSC internal RAM display: used for deciding servo system failure according to servo learning values.

14.4. Using Recovery Disc

14.4.1. Recovery Process

1. **Insert the recovery disc (RFKZD5TR006) to the player to replay.**
2. **The recovery process automatically starts, and a message of completion prompts on the screen.**
3. **Remove the disc.**
4. **Turn off the power.**

14.4.2. Version Upgrade Process

1. **Insert the recovery disc to the player to replay.**
2. **The version of player is automatically checked and prompts if**

necessary.

3. Select version upgrade process using the cursor keys on the remote controller unit. (Select YES or NO)
4. a. If YES is selected, the process starts.
   b. If NO is selected, only the recovery process is applied.
5. a. When the version upgrade process is complete, a message of completion appears on the screen. Remove the disc.
   b. Follow the instruction appearing on the screen, and remove the disc.
6. Turn off the power.

14.5. Total Usage Time Display

1. Details of Operation/Display

__1234__5678	Total usage time of DVD/CD lasers Time is shown by the ten hours in the decimal digit.
____T2__1234	Total usage time of spindle motor Time is shown by the ten hours in the decimal digit.

Keys for Operation: / Laser usage time: While the player is stopped and no disc is inserted, press both the ■ button on the player and the ▲ button on the remote controller unit. / Spindle motor usage time: While the player is stopped and no disc is inserted, press both the ■ button on the player and the ▶ button on the remote controller unit. / / To reset the usage time, while the usage time is displayed: / Laser usage time: press both the ■ button on the player and the ▼ button on the remote controller unit. / Spindle motor usage time: press both the ■ button on the player and the ◀ button on the remote controller unit.

2. Purpose of Use
   To obtain reference data of laser and spindle motor systems during failure diagnosis. / To check faulty parts during re-repair.

15. Adjustment Procedure

15.1. Required Tools and Equipment

15.1.1. Usage Equipment

Purpose of Use	Tools/Equipment	Model/Product Number
Tilt adjustment	DVD test disc	DVDT-S15 or DVDT-S01
	Hexagonal wrench`	Available on the market (2mm)
Others	Screw lock	RZZ0L01
	Grease	RFKXGAK152, RFKXPG641
Checking	CD test disc	PVCD-K06 and any commercially available disc
	VCD test disc	
	Recovery disc	PFKZD5TR006

15.1.2. Necessity of Adjustment

15.1.2.1. Necessity of Optical Adjustment

- Before starting optical system adjustment, be sure to wear proper protection gear against static electricity.
- Optical adjustment (optical pickup tilt adjustment) is required after following parts are replaced:
  1. Optical pickup
  2. Spindle motor assembly
  3. Optical pickup peripherals such as a rail, etc.

Note:
Optical adjustment is not necessary after replacement of other parts inside traverse, however, may require when picture deterioration is detected. Optical adjustment cannot be applied to the inside of optical pickup. When a traverse unit is replaced, the adjustment is not necessary.

15.1.3. Storing and Handling Test Discs

Surface precision is vital for DVD test discs. Be sure to store and handle them carefully.

- Do not leave the discs uncovered on the work desk or other places after use.
- Handle the discs carefully to prevent scratches. Put each disc in its case and place it in the standing position. Store the discs in a cool place and avoid direct sunlight or air conditioner.
- Accurate adjustment cannot be expected with a disc warped

against a flat surface. Obtain a new test disc for optical adjustment.

- If a warped disc is used, adjustment would result incorrectly, and other discs could not be used.

15.1.4. Optical Adjustment (Optical Pickup Tilt Adjustment)

Measurement point	Adjustment point	Mode	Disc
	Tangential adjustment screw / Tilt adjustment screw	T1 (inner track) replay / T43 (outer track) replay	DVDT-S15 or DVD
Measuring equipment		**Adjustment value**	
None (LCD display of the player is used.)		Adjust that jitter value becomes minimum.	

15.1.4.1. Adjustment Procedure

1. While the player is stopped and no disc is inserted, select the DVD function. Press and hold down the ■ button on the player and the number button, "5" on the remote controller unit.
2. Check that "J_xxx_yyy_zz" is appearing on the display.

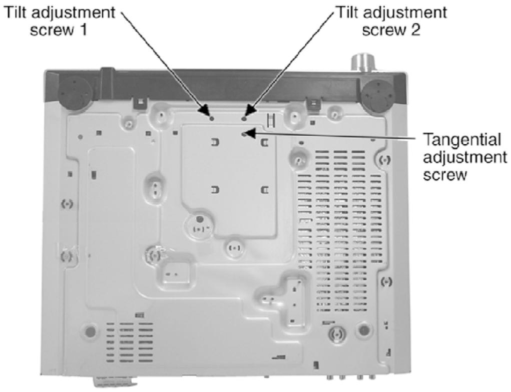
For your information:
The values, "yyy" and "zz" are not associated to jitter value. / "yyy" indicates the frequency of error occurrence. / "zz" indicates the focus drive value.

Note:
Jitter value appears on the display.

3. Replay T01 (inner track) of the test disc.
4. Adjust till the jitter value becomes minimum, using a tangential adjustment screw. <Fig. 15-1>
5. Replay T43 (outer track) of the test disc.
6. Adjust till the jitter value becomes minimum, using a tilt adjustment screw 1. <Fig. 15-1>
7. Replay T43 (outer track) of the test disc.
8. Adjust till the jitter value becomes minimum, using a tilt adjustment screw 2.<Fig. 15-1>
9. Adjust till the jitter value becomes, using the tilt adjustment

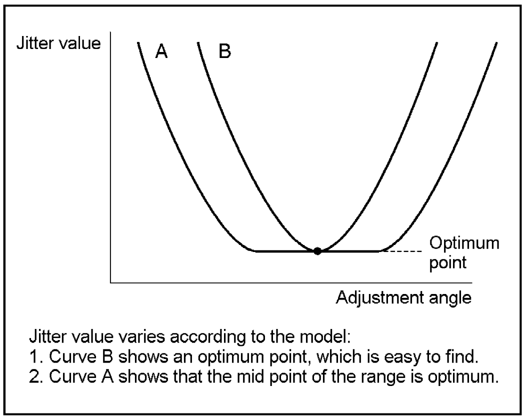
screws 1 and 2 alternatively.

Fig. 15-1



15.1.4.2. Tips

1. **Apply the tangential adjustment first and then the tilt adjustment.**
2. **Repeat the adjustment a couple of times to find the optimum point.**
3. **Complete with the tilt adjustment.**



Jitter value varies according to the model:
1. Curve B shows an optimum point, which is easy to find.
2. Curve A shows that the mid point of the range is optimum.

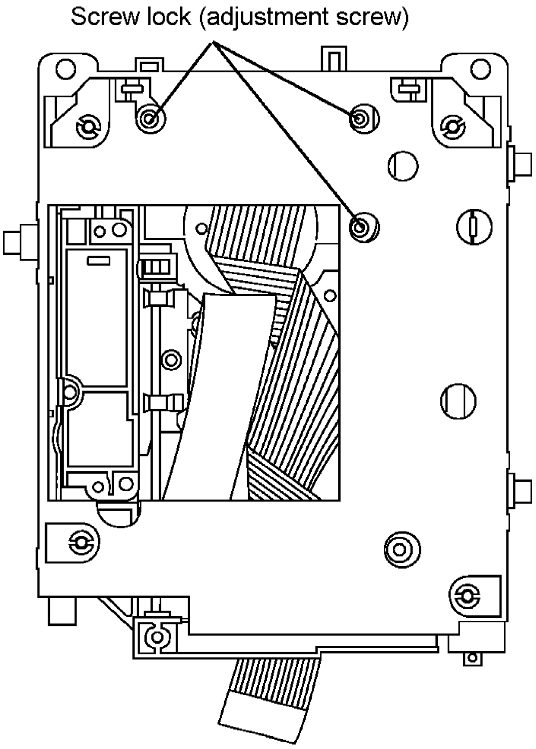
15.1.4.3. Check After Adjustment

Replay test discs or other commercial discs in order to confirm that no picture deterioration or sound skipping is detected in the inner, middle, and outer tracks. After this, fasten each adjustment screw securely using a screw lock.

15.1.4.4. Procedure for Screw Lock

1. **After adjustment, remove the top cover, clamper base, disc tray and then traverse unit.**
2. **Place the traverse unit upside down, and fasten the adjustment screws with a screw lock. <Fig. 15-2>**
3. **After fastening the screws, assemble in order of the traverse unit, disc tray, clamper base, and then top cover.**

Fig. 15-2



16. Illustration of IC's, Transistors and Diodes

17. Terminal Function of IC's

17.1. IC801(C2CBHF000270):16bit / 1-chip Micro Controller

PIN No.	Mark	I/O	Function
1	VSEL_B	O	Picture input SELECTOR B
2	VSEL_A	O	Picture input SELECTOR A
3	VMUTE2	O	Picture mute output 2 (L: Mute ON)
4	VMUTE1	O	Picture mute output 1 (L: Mute ON)
5	WIDE1	O	WIDE 1 setting
6	DWIDE1	O	DWIDE1 setting
7	DWIDE2	O	DWIDE2 setting
8	BYTE	-	Connected to GND
9	Vss	-	Connected to GND at 10k ohm
10	NC	-	Not in use/Open
11	NC	-	Not in use/Open
12	RESET	I	Reset signal input
13	Xout	O	Main clock output (10MHz)
14	Vss	-	Connected to GND
15	XIN	I	Main clock input (10MHz)

PIN No.	Mark	I/O	Function
16	Vcc	-	Power supply terminal (+5V)
17	NMI	I	Connected to power supply terminal (+5V)
18	AC IN	I	Power failure detect input
19	RMT	I	Remote control signal input
20	NC	-	Not in use/Open
21	DRV_1	I/O	Tray control terminal 1
22	DRV_2	I/O	Tray control terminal2
23	DRV_MUTE	I/O	Tray control terminal3
24	CLOSE_SW	I/O	Loading mechanism close switch (L: Switch ON)
25	OPEN_SW	I/O	Loading mechanism open switch (L: Switch ON)
26	TRY/TRV	I/O	Tray/traverse switch
27	DVD_MUTE	I	DVD mute input
28	DVD_CK	I	DVD clock input
29	DVD_STA	I	DVD status input
30	DVD_CMD	O	DVD command output
31	FL_DA	O	FL driver IC data output
32	FL_CS	O	FL driver IC CS output
33	FL_CK	O	FL driver IC clock output
34	FL-RST	I/O	FL driver IC reset signal
35	M_SO	O	AAC microcomputer communication serial data output
36	M_SI	I	AAC microcomputer communication serial data input
37	M_CK	O	AAC microcomputer communication clock output
38	M_RST	O	AAC microcomputer communication reset output
39	JOG_B	I	Volume JOG input B
40	JOG_A	I	Volume JOG input A
41	/EPM	I/O	Connected to GND via resistance
42	SW1	I/O	Shuttle JOG switch 1
43	SW2	I/O	Shuttle JOG switch2
44	SW3	I/O	Shuttle JOG switch3
45	SW4	I/O	Shuttle JOG switch4
46	CE	I/O	Connected to GND via resistance
47	PHONE SW	I	PHONE DET input (L: No PHONE)

PIN No.	Mark	I/O	Function
48	SEL_ST	O	Analog switch store output
49	SEL_DA	O	Analog switch data output
50	SEL_CK	O	Analog switch clock output
51	VOL_LA	I/O	4ch volume latch
52	VOL_DA	I/O	4ch volume data
53	VOL_CK	I/O	4ch volume clock
54	HP_MUTE	I/O	Headphone mute
55	ECS	O	EEPROM CS output
56	EDA	I/O	EEPROM data input/output
57	ECK	O	EEPROM clock output
58	NC	-	Not in use/Open
59	AAC_ PWRCNT	I/O	Power supply switch to AAC module (H: AAC module active)
60	LED_CNT	I/O	LED lamp control (L: ON, H: OFF)
61	CF_1/2	I/O	Center focus1/2
62	Vcc	-	Power supply terminal (+5V)
63	CF_ON/ OFF	I/O	Center focus ON/OFF
64	Vss	-	Connected to GND
65	BS_L	I/O	OPT IN MUTE
66	PCNT	O	PCNT output
67	DVD_ PWCNT	O	DVD module power control signal
68	NC	-	Not in use/Open
69	VR_ATT	I/O	Volume ATT
70	MUTE_SW	O	Mute SW ch output
71	MUTE_C& S	O	Mute C ch output
72	MUTE_ F& SW	O	Mute F ch output
73	HP_CNT	I/O	Power amplifier mute (H: Mute ON)
74	DSP_RST	O	DSP reset output
75	DSP_DA	O	DSP data output
76	DSP_CK	O	DSP clock output
77	DSP_CS	O	DSPCS output
78	DC DET	I	DC DET input
79	TUN_CE	O	PLL CE output
80	TUN_CK	O	PLL clock output
81	TUN_DI	I	Tuner DO/ST input
82	TUN_DO	O	PLL data output
83	TUN_SD	I	Tuner DET input

PIN No.	Mark	I/O	Function
84	RDS_RDY	I	RDS READY input
85	RDS_DO	I	RDS data input
86	RDS_CK	O	RDS clock output
87	AAC_RQM	O	Request signal output to AAC microcomputer communication
88	AAC_RQS	O	Request signal output to AAC microcomputer communication
89	AAC_MUTE	I	Mute signal input to AAC microcomputer communication
90	NC	-	Not in use/Open
91	MT1/ST1	I/O	MT1/SC1 switch (H: MT1, L: ST1)
92	PROG/INT	I/O	Progressive/Inter race switch (H: Progressive, L: Inter race)
93	DES3	I/O	Model setting3
94	DES2	I/O	Model setting2
95	DES1	I/O	Model setting1
96	AVss	-	GROUND
97	KEY	I	KEY input
98	VREF	-	Reference voltage (+5V)
99	AVcc	-	Analog power supply terminal (+5)
100	525P	I/O	Progressive ON/OFF switch (H: ON, L: OFF)

17.2. IC3001(MN6775511): / AV Decorder

PIN No.	Mark	I/O	Function
1	VSS	-	Digital GND
2	MDQ9	I/O	SRAM data bass 9
3	MDQ5	I/O	SRAM data bass 5
4	MDQ10	I/O	SRAM data bass 10
5	VDD	-	Digital power supply (3.3V)
6	MDQ4	I/O	SRAM data bass 4
7	MDQ11	I/O	SRAM data bass 11
8	MDQ3	I/O	SRAM data bass 3
9	MDQ12	I/O	SRAM data bass 12
10	VSS	-	Digital GND
11	MDQ2	I/O	SRAM data bass 2
12	LVDD	-	Internal digital logic power supply (1.5V)
13	MDQ13	I/O	SRAM data bass 13
14	MDQ1	I/O	SRAM data bass 1
15	VDD	-	Digital power supply (3.3V)
16	MDQ14	I/O	SRAM data bass 14
17	MDQ0	I/O	SRAM data bass 0
18	MDQ15	I/O	SRAM data bass 15
19	VSS	-	Digital GND
20	HMD	I	HCLK polarity selection signal
21	XRST	I	System reset terminal
22	XHINT	O	Interruption input to host (low active)
23	XHINT2	O	Interruption input to host (low active)
24	XDK	O	Data acknowledge output to host
25	XWRH	I	Write enable from host (low active)
26	VDD	-	Digital power supply (3.3V)
27	XWR	I	Write enable from host (low active)
28	XRD	I	Read enable from host (low active)
29	XCS	I	Chip select from host (low active)
30	LVDD	-	Internal digital logic power supply (1.5V)
31	HCLK	I	CLK input from host
32	HA1	I	Address input 1 from host
33	HA2	I	Address input 2 from host
34	VSS	-	Digital GND

PIN No.	Mark	I/O	Function
35	HA3	I	Address input 3 from host
36	HA4	I	Address input 4 from host
37	HA5	I	Address input 5 from host
38	HA6	I	Address input 6 from host
39	VDD	-	Digital power supply (3.3V)
40	HA7	I	Address input 7 from host
41	HA8	I	Address input 8 from host
42	HA9	I	Address input 9 from host
43	HA10	I	Address input 10 from host
44	VSS	-	Digital GND
45	HA11	I	Address input 11 from host
46	HA12	I	Address input 12 from host
47	HA13	-	Address input 13 from host
48	LVDD	-	Internal digital logic power supply (1.5V)
49	HA14	I	Address input 14 from host
50	HA15	I	Address input 15 from host
51	HA16	I	Address input 16 from host
52	VDD	-	Digital power supply (3.3V)
53	VSS	-	Digital GND
54	HA17	I	Address input 17 from host
55	HD0	I/O	host data bass 0
56	HD1	I/O	Data input 1 from host
57	HD2	I/O	Data input 2 from host
58	VDD	-	Digital power supply (3.3V)
59	HD3	I/O	Data input 3 from host
60	HD4	I/O	Data input 4 from host
61	HD5	I/O	Data input 5 from host
62	VSS	-	Digital GND
63	HD6	I/O	Data input 6 from host
64	HD7	I/O	Data input 7 from host
65	HD8	I/O	Data input 8 from host
66	VDD	-	Digital power supply (3.3V)
67	HD9	I/O	Data input 9 from host
68	HD10	I/O	Data input 10 from host
69	LVDD	-	Internal digital logic power supply (1.5V)
70	HD11	I/O	Data input 11 from host
71	VSS	-	Digital GND
72	HD12	I/O	Data input 12 from host
73	HD13	I/O	Data input 13 from host
74	HD14	I/O	Data input 14 from host
75	VDD	-	Digital power supply (3.3V)
76	HD15	I/O	Data input 15 from host

PIN No.	Mark	I/O	Function
77	DVALID	I	Valid signal of bit stream input data
78	DSTR	I	CLK signal for bit stream
79	STRQ	O	Request of program stream
80	VSS	-	Digital GND
81	STD7	I	Bit stream parallel input7
82	STD6	I	Bit stream parallel input6
83	STD5	I	Bit stream parallel input5
84	STD4	I	Bit stream parallel input4
85	STD3	I	Bit stream parallel input3
86	STD2	I	Bit stream parallel input2
87	STD1	I	Bit stream parallel input1
88	STD0	I	Bit stream parallel input0
89	VDD	-	Digital power supply (3.3V)
90	IECOUT	O	IEC958 format data output
91	ADOUT0	O	Audio data output (CH1/CH2)
92	ADOUT1	O	Audio data output (CH3/CH4)
93	ADOUT2	O	Audio data output (CH5/CH6)
94	ADOUT3	O	Audio data output (CH7/CH8)
95	VSS	-	Digital GND
96	SRCK	O	bit clock output
97	LRCK	O	LR clock output
98	LVDD	-	Internal digital logic power supply (1.5V)
99	PHCOPMO	O	Audio-PLL phase comparison output
100	EXTCK	I	Audio CLK input
101	CLK121	I	CLK test input terminal (L or H fix)
102	PCLK	I	Main-PLL system clock input (27MHz or 54MHz)
103	VDD	-	Digital power supply (3.3V)
104	VSS	-	Digital GND
105	PLLAVDD	-	Main-PLL power supply
106	TCPOUT	O	Main-PLL test output terminal (Used as open.)
107	PLLAVSS	-	Main-PLL GND
108	DAC3OUT	O	DAC output 3
109	DAC1OUT	O	DAC output 1
110	COMP2	I	DAC stabilization volume connection terminal 2
111	IREF2	I	Resistance terminal 2 for DAC bias current electricity setting

PIN No.	Mark	I/O	Function
112	AVDD	-	DAC analog power supply (3.3V)
113	AVSS	-	DAC analog GND
114	DAC2OUT	O	DAC output 2
115	VREF	I	DAC gain adjustment terminal
116	DAC4OUT	O	DAC output 4
117	COMP1	I	DAC stabilization volume connection terminal 1
118	AVDD	-	DAC analog power supply (3.3V)
119	IREF1	I	Resistance terminal 1 for DAC bias current electricity setting
120	DAC5OUT	O	DAC output 5
121	AVSS	-	DAC analog GND
122	VSS	-	Digital GND
123	DCTEST	I	DC test mode terminal (Used as open)
124	TESTSEL2	I	Test mode terminal 2 (L fix)
125	TESTSEL1	I	Test mode terminal 1 (L fix)
126	TESTSEL0	I	Test mode terminal 0 (DAC CLK selection signal)
127	LVDD	-	Internal digital logic power supply (1.5V)
128	VCLK	I	Digital video data CLK (27MHz)
129	VDIN7	I	Digital video data input 7
130	VDIN6	I	Digital video data input 6
131	VDD	-	Digital power supply (3.3V)
132	VDIN5	I	Digital video data input 5
133	VDIN4	I	Digital video data input 4
134	VDIN3	I	Digital video data input 3
135	LVDD	-	Internal digital logic power supply (1.5V)
136	VDIN2	I	Digital video data input 2
137	VDIN1	I	Digital video data input 1
138	VDIN0	I	Digital video data input 0
139	VSS	-	Digital GND
140	VDOUT0	O	Digital video data output 0
141	VDOUT1	O	Digital video data output 1
142	VDOUT2	O	Digital video data output 2
143	VDOUT3	O	Digital video data output 3
144	VDD	-	Digital power supply (3.3V)

PIN No.	Mark	I/O	Function
145	VDOUT4	O	Digital video data output 4
146	VDOUT5	O	Digital video data output 5
147	VDOUT6	O	Digital video data output 6
148	VSS	-	Digital GND
149	VDOUT7	O	Digital video data output 7
150	MDQ24	I/O	SDRAM data bass 24
151	MDQ23	I/O	SSDRAM data bass 23
152	VDD	-	Digital power supply (3.3V)
153	MDQ25	I/O	SDRAM data bass 25
154	MDQ22	I/O	SDRAM data bass 22
155	MDQ26	I/O	SDRAM data bass 26
156	VSS	-	Digital GND
157	VDD	-	Digital power supply (3.3V)
158	MDQ21	I/O	SDRAM data bass 21
159	MDQ27	I/O	SDRAM data bass 27
160	MDQ20	I/O	SDRAM data bass 20
161	VSS	-	Digital GND
162	MDQ28	I/O	SDRAM data bass 28
163	MDQ19	I/O	SDRAM data bass 19
164	MDQ29	I/O	SDRAM data bass 29
165	VDD	-	Digital power supply (3.3V)
166	MDQ18	I/O	SDRAM data bass 18
167	MDQ30	I/O	SDRAM data bass 30
168	MDQ17	I/O	SDRAM data bass 17
169	MDQ31	I/O	SDRAM data bass 31
170	VSS	-	Digital GND
171	MDQ16	I/O	SDRAM data bass 16
172	LVDD	-	Internal digital logic power supply (1.5V)
173	DQM3	-	SRAM data byte (mask signal 3)
174	DQM2	-	SRAM data byte (mask signal 2)
175	VDD	-	Digital power supply (3.3V)
176	MA3	O	SDRAM address 3
177	MA4	O	SDRAM address 4
178	MA2	O	SDRAM address 2
179	MA5	O	SDRAM address 5
180	VSS	-	Digital GND
181	MA1	O	SDRAM address 1
182	MA6	O	SDRAM address 6
183	MA0	O	SDRAM address 0
184	VDD	-	Digital power supply (3.3V)

PIN No.	Mark	I/O	Function
185	MCKI	I	CLK input terminal from data input from SRAM
186	LVDD	-	Internal digital logic power supply (1.5V)
187	MCK	O	CLK output to SRAM
188	MA7	O	SDRAM address 7
189	MA10	O	SDRAM address 10
190	VSS	-	Digital GND
191	MA8	O	SDRAM address 8
192	MA11	O	SDRAM address 11
193	XWE	O	SRAM write enable signal
194	VDD	-	Digital power supply (3.3V)
195	BA0	-	SDRAM bank 0
196	MA9	O	SDRAM address 9
197	BA1	-	SDRAM bank 1
198	XCSM	O	Chip select signal for main SDRAM
199	VSS	-	Digital GND
200	XRAS	O	RAS signal for SRAM
201	XCAS	O	CAS signal for SRAM
202	DQM0	-	Data byte for SRAM (mask signal 0)
203	VDD	-	Digital power supply (3.3V)
204	DQM1	-	Data byte for SRAM (mask signal 1)
205	MDQ7	I/O	SRAM data bank 7
206	MDQ8	I/O	SRAM data bank 8
207	MDQ6	I/O	SRAM data bank 6
208	VSS	-	Digital GND

17.3. IC5201(AN22030A-VT): / Front End Processor

PIN No.	Mark	I/O	Function
1	LPC1		MD connection terminal for DVD
2	LPCO1		TR connection terminal of LD drive for DVD
3	LPC2		MD connection terminal for CD
4	LPCO2		TR connection terminal of LD drive for CD
5	POFLT	O	Track detection threshold level terminal
6	NC1	-	Not in use/Open
7	FBAL		Focus balance control terminal
8	TBAL		Tracking balance control terminal
9	TEFLT	O	Tracking error detect filter terminal
10	MONI2	O	IC forwarding detection monitor output terminal 2 (Not in use/Open)
11	TE	O	Tracking error signal output terminal 2
12	RFTE	O	Radial differential motion output terminal
13	FS	O	Focus total addition signal output terminal
14	FE	O	Focus error signal output terminal
15	VHALF	O	VHAL voltage output terminal
16	VSS	-	CMOS ground terminal
17	STANBY		Standby mode control terminal
18	SEN	I	Serial data transmission enable input terminal
19	SCK	I	Serial data transmission clock input terminal
20	STDIO	I	Serial data transmission data input terminal
21	OFTR	O	Mirror detect/phase differential off track detect signal output terminal
22	BDO	O	BD0 detect +BCA detect output terminal
23	DTRD	I	RAM replay data read switch input terminal

PIN No.	Mark	I/O	Function
24	SHOLD		SAG cancel hold control terminal
25	VDD	-	CMOS power supply terminal (3.3V)
26	NC2	-	Not in use/Open
27	RSCL		Reference current electricity setting terminal
28	GND2		Ground terminal 2 (3.3V)
29	BDOSL		BD0 detect slow envelope detecting terminal
30	MIRSL		Mirror detect slow envelope detecting terminal
31	DCAGC		Filter output DC cut filter terminal
32	RBCA		BCA detect terminal
33	VCC2	-	Power supply terminal 2 (3.3V)
34	FLTOP	O	Filter amplifier forward output terminal
35	FLTON	O	Filter amplifier reverse output terminal
36	DCFLT		RF output DC cut filter terminal
37	SAG		SAG cancel filter terminal
38	AGCG1		GC amplifier gain control terminal 1
39	AGCG2		GC amplifier gain control terminal 2
40	NC3	-	Not in use/Open
41	SHORT		VFOSHORT control terminal
42	IDGT		RAM replay address read switch terminal
43	TESTSG	I	Test signal input terminal
44	CRFHP1	O	RF high-pass filter terminal 1
45	CRFHP2	O	RF high-pass filter terminal 2
46	RFINP	I	RF signal forward input terminal
47	RFINN	I	RF signal reverse input terminal
48	PEAK	O	Peak envelope detect filter terminal
49	RFENV	O	RF envelope output terminal
50	VCC1	-	Power supply terminal (5V)
51	VIN5	I	CD-FE astigmatism input terminal 1

PIN No.	Mark	I/O	Function
52	VIN6	I	CD-FE astigmatism input terminal 2
53	VIN7	I	DVD-FE SSD input terminal 1
54	VIN8	I	DVD-FE SSD input terminal 2
55	VREF	O	VREF voltage output terminal
56	VREFRF	O	VREFRF voltage output terminal
57	MONI	O	IC forwarding detection monitor output terminal 1 (Not in use/Open)
58	VIN1	I	DVD-TE4 split RF input terminal 1
59	VIN2	I	DVD-TE4 split RF input terminal 2
60	VIN3	I	DVD-TE4 split RF input terminal 3
61	VIN4	I	DVD-TE4 split RF input terminal 4
62	VIN9	I	CD-TE3 beam detection input terminal 1
63	VIN10	I	CD-TE3 beam detection input terminal 2
64	GND1	-	Ground terminal 1 (5V)

18. Block Diagram

19. Schematic Diagram

(All schematic diagrams may be modified at any time with the development of the new technology)

Note:

S931

: POWER switch

S932

: OPEN/CLOSE switch

S933

: F.SKIP switch

S934

: PLAY switch

S935

: PAUSE switch

S936

: STOP switch

S937

: R.SKIP switch

S938

: SELECTOR switch

S939

: RDS switch

S940

: SFC switch

S941

: S.Woofer switch

SW2501

: OPEN switch

SW2502

: CLOSE switch

- The voltage value and waveforms are the reference voltage of this unit measured by DC electronic voltmeter (high impedance) and oscilloscope on the basis of chassis. Accordingly, there may arise some error in voltage values and waveforms depending upon the internal impedance of the tester or the measuring unit.

(( )) : CD

< > : FM

- Importance safety notice :
  Components identified by ⚠ mark have special characteristics important for safety. Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used. When replacing any of components, be sure to use only manufacturer's specified parts shown in the parts list.

Caution !

IC, LSI and VLSI are sensitive to static electricity.
Secondary trouble can be prevented by taking care during repair.

- Cover the parts boxes made of plastics with aluminium foil.
- Put a conductive mat on the work table.

- Ground the soldering iron.
- Do not touch the pins of IC, LSI or VLSI with fingers directly.

20. Printed Circuit Board

21. Wiring Connection Diagram

22. Parts Location and Replacement Parts List

Notes:

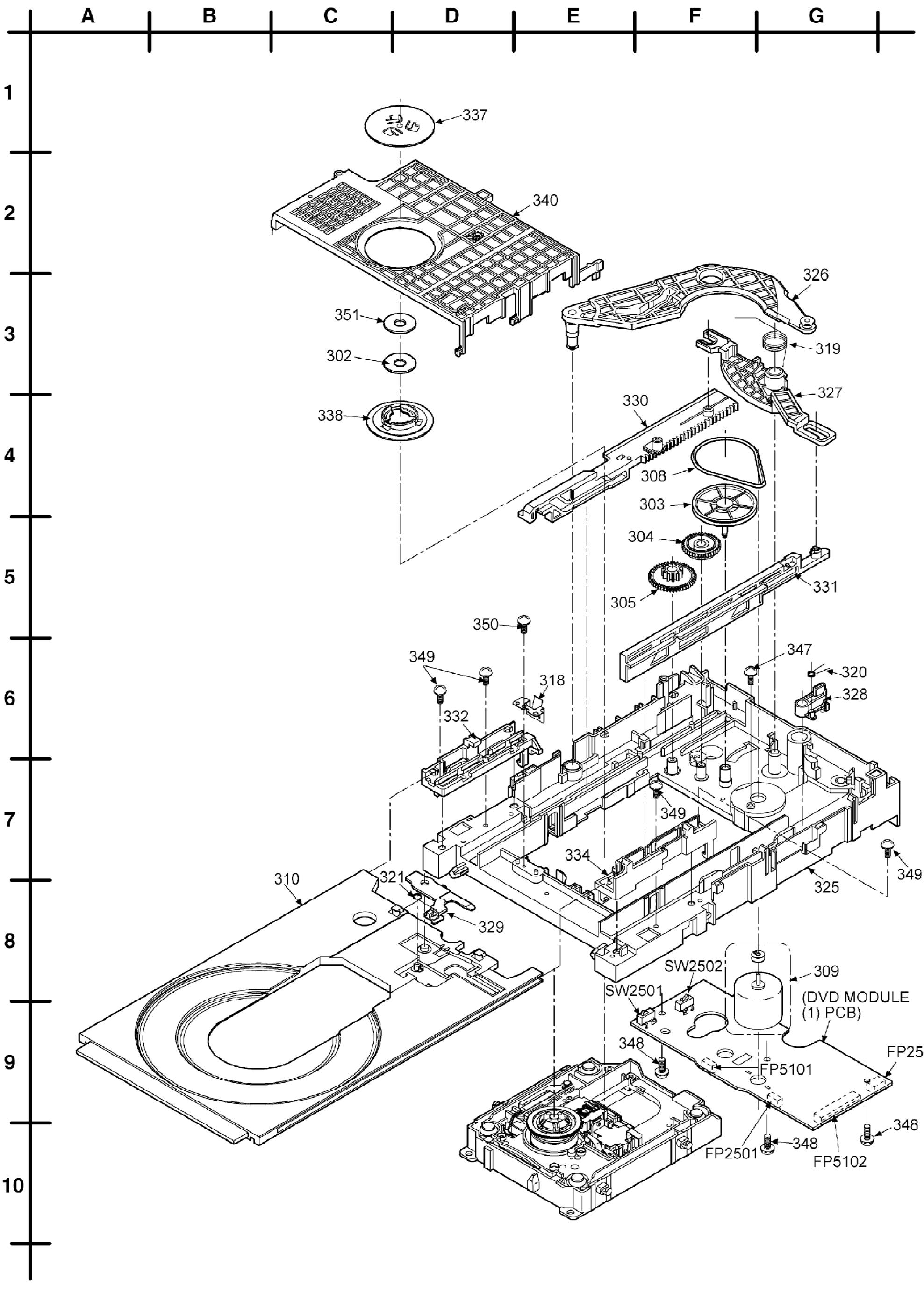
- Important safety notice:
  Components identified by ⚠ mark have special characteristics important for safety.
  Furthermore, special parts which have purposes of fire-retardent (resistors), high-quality sound (capacitors), low noise (resistors), etc are used.
  When replacing any of these components, be sure to use only manufacturer’s specified parts shown in the parts list.
- The parenthesized indications in the Remarks columns specify the areas or colour. (Refer to the cover page for area or colour)
  Parts without these indications can be used for all areas.
- Warning: This product uses a laser diode. Refer to caution statements on “Precaution of Laser Diode”.
- Capacitor values are in microfarads (μ F) unless specified otherwise, P= Pico-farads (pF), F= Farads.
- Resistance values are in ohms, unless specified otherwise, 1K= 1,000 (OHM).
- The marking (RTL) indicates that the Retention Time is limited for this items. After the discontinuation of this assembly in production, the item will continue to be available for a specific period of time. The retention period of a availability is dependent on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.
- [M] Indicates in the Remarks columns indicates parts supplied by PAVCSG.
- The “(SF)” mark denotes the standard part.

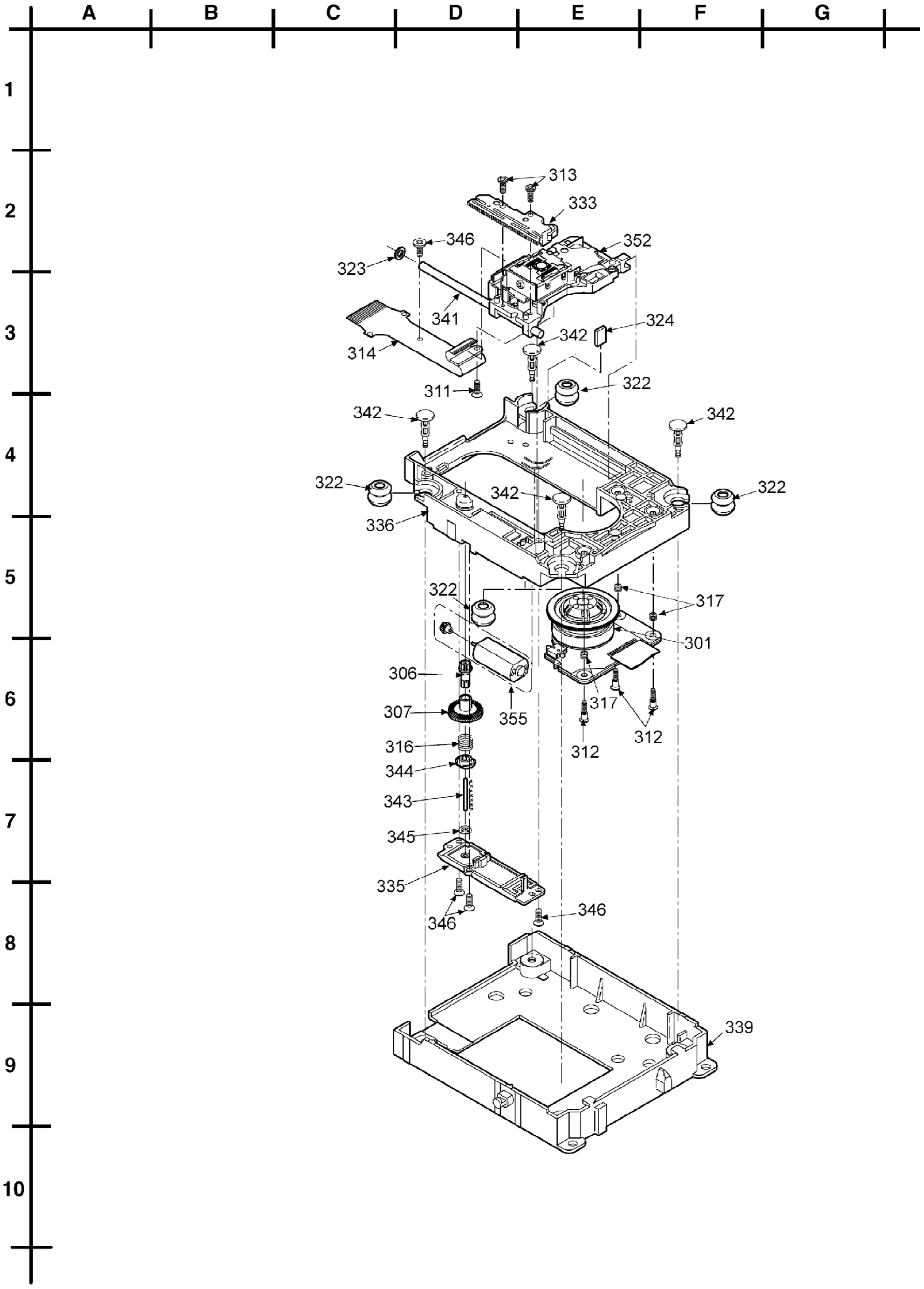
- Reference for O/I book languages are as follows:

Ar :	Arabic	Du :	Dutch	It :	Italian	Sp :	Spanish
Cf :	Canadian French	En :	English	Ko :	Korean	Sw :	Swedis
Cz :	Czech	Fr :	French	Po :	Polish	Co :	Traditio Chinese
Da :	Danish	Ge :	German	Ru :	Russian	Cn :	Simplifi Chinese

22.1. CD Loading Mechanism

22.1.1. CD Loading Mechanism Parts Location


A
B
C
D
E
F
G
SW2502
SW2501
(DVD MODULE
(1) PCB)
FP2503
FP5101
FP2501
FP5102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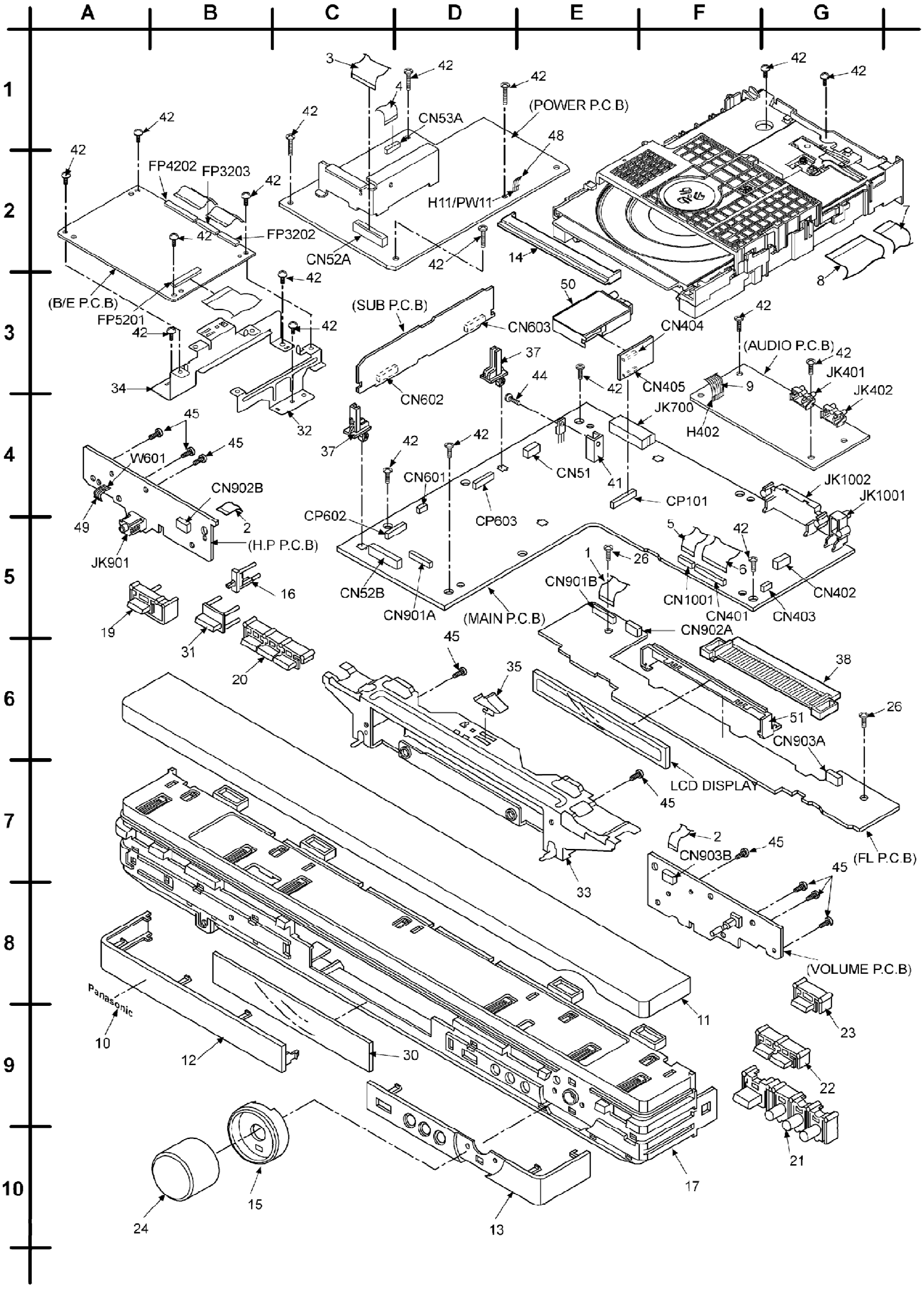
22.1.2. DVD Loading Mechanism Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		TRAVERSE DECK	
301	BML3E1CRL	SPINDLE MOTOR	[M]
302	JSM0048	MAGNET	[M]
303	RDG0547	PULLEY GEAR	[M]
304	RDG0548	RELAY GEAR	[M]
305	RDG0549	DRIVE GEAR	[M]
306	RDG0557	PINON SHAFT	[M]
307	RDG0558	BEVEL RING	[M]
308	RDV0070	BELT	[M]
309	REM0102	MOTOR UNIT	[M]
310	RGQ0338-Q	TRAY	[M]
311	RHD14095	FPC SCREW	[M]
312	RHD17042	TILT ADJUST SCREW	[M]
313	RHD17046	RACK SCREW	[M]
314	RJB2621A	RELAY FPC	[M]
316	RMB0713-1	THRUST SPRING	[M]
317	RMB0714	TILT SP	[M]
318	RMC0387	SUPPORT SPRING	[M]
319	RME0350	CHANGE LEVER SPRING	[M]
320	RME0351	LOCK LEVER SPRING	[M]
321	RME0353	TRAY SLIDER SPRING	[M]
322	RMG0598-A	FLOATING RUBBER	[M]
323	RMG0617-H	CUSHION RUBBER A	[M]
324	RMG0618-H	CUSHION RUBBER B	[M]
325	RMK0537	MECHA CHASSIS	[M]
326	RML0627-2	DRIVE ARM	[M]
327	RML0628	CHANGE LEVER	[M]
328	RML0629	LOCK LEVER	[M]
329	RML0631	TRAY SLIDER	[M]
330	RMM0247-2	DRIVE RACK	[M]
331	RMM0248	SUB RACK	[M]
332	RMM0250	GUIDE PIECE (L)	[M]
333	RMM0252	OPU DRIVE RACK	[M]
334	RMM0253	GUIDE PIECE R	[M]
335	RMQ1112	MOTOR COVER	[M]
336	RMR1466-K	TRV BASE	[M]
337	RMR1447-X	MAGNET HOLDER	[M]
338	RMR1446-X	CLAMPER	[M]
339	RMR1467-K	MIDDLE CHASSIS	[M]
340	RMR1468-K	CLAMP PLATE	[M]
341	RMS0788	GUIDE SHAFT	[M]
342	RMS0789	FIXED PIN	[M]
343	RMS0798	GEAR SHAFT	[M]
344	RMX0233	THRUST WASHER	[M]
345	RMX0247	WASHER	[M]
346	VHD1224	ADJ SPRING HOLDER SC	[M]
347	XQN17+C25FZ	MOTOR SCREW	[M]
348	XTN26+6G	SCREW	[M]
349	XTN26+8G	ADDITIONAL SCREWS	[M]
350	XTV2+6G	PCB SCREW	[M]
351	XWG6FFY	WASHER	[M]
352	RD-DDP013AS	4.17 OPU WITH PACKIN	[M]
355	RXQ0946	TRV MOTOR SUB ASSY	[M]

22.2. Cabinet

22.2.1. Cabinet Parts Location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CN53A
42
(POWER P.C.B)
48
42
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FP4202
FP3203
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H11/PW11
42
FP3202
CN52A
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42
(B/E P.C.B)
FP5201
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(SUB P.C.B)
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CN603
CN404
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42
37
44
(AUDIO P.C.B)
42
JK401
JK402
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CN602
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CN405
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JK700
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H402
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W601
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42
42
CN601
CN51
41
JK1002
JK1001
CN902B
CP101
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2
CP602
CP603
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42
(H.P P.C.B)
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26
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JK901
CN901B
16
CN52B
CN1001
CN402
19
CN901A
(MAIN P.C.B)
CN401
CN403
31
CN902A
45
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51
CN903A
LCD DISPLAY
45
2
CN903B
45
(FL P.C.B)
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33
(VOLUME P.C.B)
Panasonic
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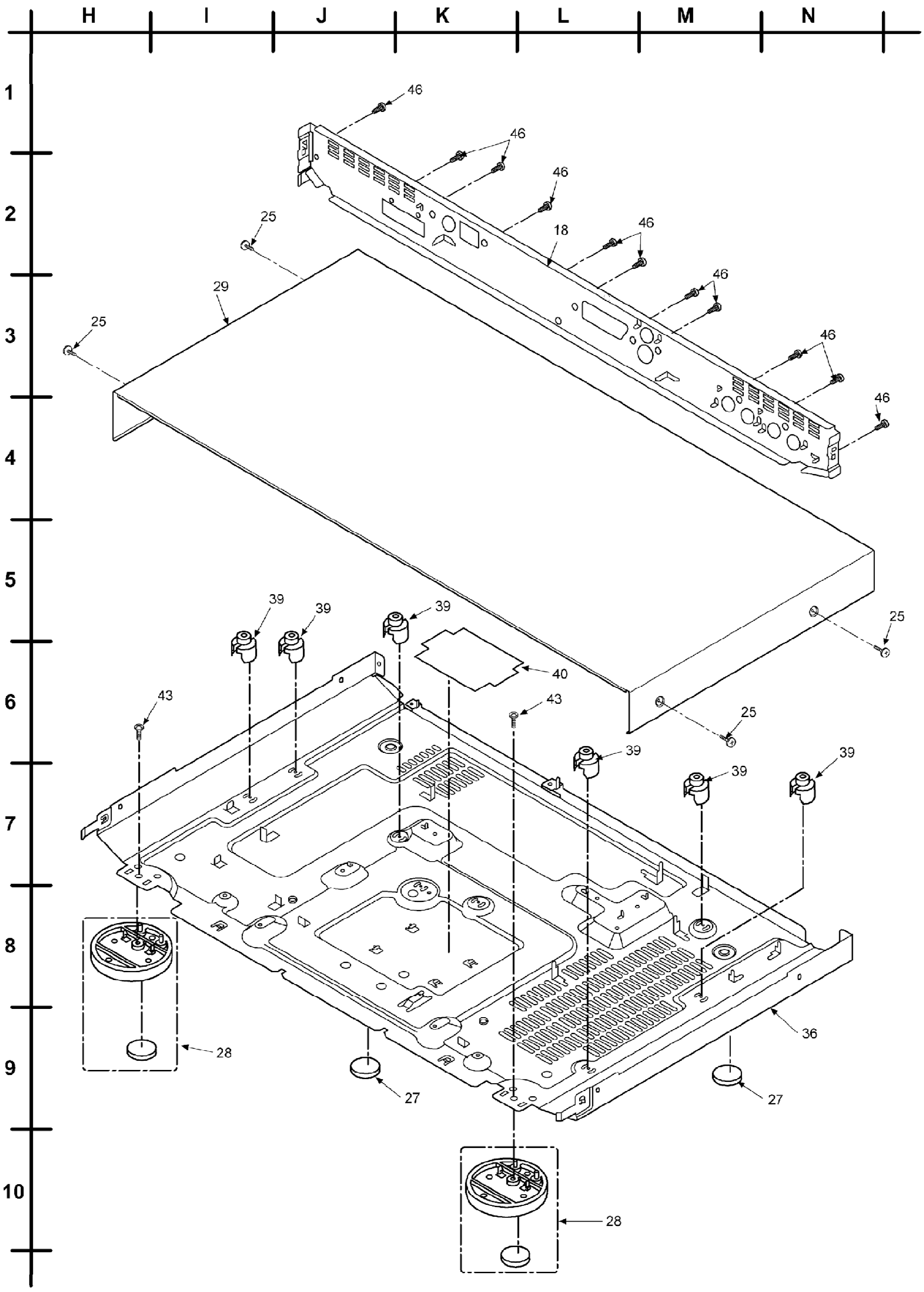
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22.2.2. Cabinet Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		CABINET AND CHASSIS	
1	REEX0221	22P FFC (FL-AMIN)	[M]
2	REEX0222	8P FFC (PANEL-FL)	[M]
3	REEX0223	21P FFC (MAIN-POWER)	[M]
4	REEX0227	17P FFC (POWER-B/E)	[M]
5	REEX0228	15P FFC (AMIN-B/E)	[M]
6	REEX0229	26P FFC (MAIN-B/E)	[M]
7	REEX0230	7P FFC (MAIN-DVD)	[M]
8	REEX0231-1	50P FFC (B/E-DVD)	[M]
9	REZ1502	SEL WIRE	[M]
10	RGBX0011-S	PANA BADGE	[M]
11	RGKX0177-S	TOP ORNAMENT	[M]
12	RGKX0178A-S	FRONT ORNAMENT (L)	[M]
13	RGKX0179-S1	FRONT ORNAMENT (R)	[M]
14	RGKX0180-K	DVD LID	[M]
15	RGKX0195-S	VOLUME RING	[M]
16	RGLX0060-Q	LIGHTING CHIP	[M]
17	RGPX0098-K	FRONT PANEL	[M]
18	RGRX0025-B	REAR PANEL	[M]
19	RGUX0509-K1	POWER BUTTON	[M]
20	RGUX0510-K	SELECTOR BUTTON	[M]
21	RGUX0512-S	CONTROL BUTTON	[M]
22	RGUX0513-K	REV/FWD SKIP BUTTON	[M]
23	RGUX0514-K	SUBWOOFER BUTTON	[M]
24	RGWX0076-S	VOLUME KNOB	[M]
25	RHD30007-S	SCREW	[M]
26	RHD30102	SCREW	[M]
27	RKA0145-K	CUSHION	[M]
28	RKAX0009-S	FOOT BASE ASSY	[M]
29	RKMX0087-S	TOP CABINET	[M]
30	RKWX0198-Q	FL WINDOW	[M]
31	RKWX0199-K	SENSOR PANEL	[M]
32	RMAX0056-1	B/E PCB SUPPORT A	[M]
33	RMAX0058	DVD SUPPORT BRACKET	[M]
34	RMAX0061-1	B/E SUPPORT B	[M]
35	RMCX0023	TOP SPRING	[M]
36	RMKX0072-1	BOTTOM CHASSIS	[M]
37	RMN0203	PCB HOLDER	[M]
38	RMNX0086	FL HOLDER	[M]
39	RMNX0109	PCB SPACER	[M]
40	RMQX0065-Q	BARRIER SHEET	[M]
41	RMY0285	SMALL HEAT SINK	[M]
42	XTB3+10JFZ	SCREW	[M]
43	XTB3+6J	SCREW	[M]
44	XTB3+8JFZ	SCREW	[M]
45	XTBS26+10J	SCREW	[M]
46	XTBS3+8JFZ1	SCREW	[M]
48	REXX0330	4P WIRE	[M]
49	REXX0353	4P WIRE	[M]
50	ENG07701Q	TUNER PACK	[M]
51	RMNX0087-1	FL SUPPORT	[M]

22.3. Component Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		PRINTED CIRCUIT BOARD	
	REP3499D	MAIN P.C.B. / BUFFER-AMP P.C.B. / TV/VCR P.C.B. / INTERFACE P.C.B.	[M] / [RTL]
	REP3422B	DVD MODULE(1) P.C.B.	[M] / [RTL]
	REP3479E	DVD MODULE(2) P.C.B.	[M] / [RTL]
	REPX0354A	PANEL P.C.B. / SENSOR P.C.B. / VOLUME P.C.B.	[M] / [RTL]
	REP3432D	POWER SUPPLY P.C.B.	[M] / [RTL]
		INTEGRATED CIRCUITS	
IC11	C0DBAJG00002	IC DC-DC CON	[M]
IC12	C0DAAHG00012	IC POWER SUPPLY	[M]
IC13	C0CAADG00019	IC AMP	[M]
IC42	C0CBAHE00002	IC 3-TERMINAL +VE VOLTAGE / REGULATOR	[M]
IC151	C1BB00000527	IC RDS	[M]
IC400	C0JZAS000004	IC ANALOG SWITCH	[M]
IC401	C0ABBB000067	IC DUAL OP-AMP	[M]
IC402	C0JBAR000292	IC ANALOG SW	[M]
IC501	C2HBZC000013	IC DSP	[M]
IC502	C1BB00000386	IC 4CH VOL	[M]
IC601	C0AABB000085	IC OPE AMP	[M]
IC602	C1BB00000389	IC BLT	[M]
IC603	C0ABCB000052	IC QUAD OP-AMP	[M]
IC700	C0CAADG00019	IC AMP	[M]
IC801	C2CBHF000270	IC 16 BIT 1-CHIP MICRO / CONTROLLERS	[M]
IC901	C0HBB0000033	IC DISPLAY DRIVE	[M]
IC1001	C9ZB00000432	IC VIDEO SELECTOR	[M]
IC1002	C1AB00001466	IC V. BUFFER	[M]
IC1003	C1AB00001731	IC V. BUFFER	[M]
IC2001	MN103S26EGA	IC SODC	[M]
IC2101	C0JBAS000116	IC LOGICICS	[M]
IC2501	C0GBF0000004	IC FORMOTOR	[M]
IC2521	C0GBG0000033	IC PRIVER	[M]
IC3001	MN6775511	IC AV DEC	[M]
IC3061	C3ABPG000063	IC 64 SDRAM	[M]
IC3062	C3ABPG000063	IC 64 SDRAM	[M]
IC4211	C0FBBK000036	IC AUDIO DAC	[M]
IC5201	AN22030A-VT	IC FEP	[M]
IC6201	MN102H60GFD	IC CPU	[M]
IC6211	C0EBE0000070	IC	[M]
IC6221	C3EBGC000033	IC EEPROM	[M]
IC6222	C0JBAA000001	IC	[M]
IC6223	C0JBAA000001	IC	[M]
IC6251	C0DBEZG00011	IC REGULATOR	[M]
IC6252	C0DBFFG00004	IC REG	[M]
IC6253	C0DBCGE00002	IC REGULATOR	[M]
IC6301	RFKFMA66F320	IC FLASH ROM	[SPC]
IC6561	C1DB00000582	IC	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
		TRANSISTORS	
Q11	KTA1046	TRANSISTOR	[M]
Q12	KTC3199GRTA	TRANSISTOR	[M]
Q13	B1ACCF000039	TRANSISTOR	[M]
Q14	B1GACFJN0005	TRANSISTOR	[M]
Q15	B1GACFJN0005	TRANSISTOR	[M]
Q16	2SB14170JA	TRANSISTOR	[M]
Q17	KTC3199GRTA	TRANSISTOR	[M]
Q18	2SB0621AHA	TRANSISTOR	[M]
Q19	KTC3199GRTA	TRANSISTOR	[M]
Q41	KTC2026	TRANSISTOR	[M]
Q42	KTA1046	TRANSISTOR	[M]
Q43	B1ACCF000039	TRANSISTOR	[M]
Q71	2SB0621AHA	TRANSISTOR	[M]
Q401	B1GBCFJN0004	TRANSISTOR	[M]
Q402	B1GBCFJN0004	TRANSISTOR	[M]
Q601	B1GFGCAA0001	TRANSISTOR	[M]
Q602	B1GFGCAA0001	TRANSISTOR	[M]
Q603	B1ADCF000001	TRANSISTOR	[M]
Q604	B1ADCF000001	TRANSISTOR	[M]
Q605	B1ABGC000001	TRANSISTOR	[M]
Q606	B1ABGC000001	TRANSISTOR	[M]
Q607	B1GDCFJA0001	TRANSISTOR	[M]
Q608	B1GDCFJA0001	TRANSISTOR	[M]
Q610	B1GFGCAA0001	TRANSISTOR	[M]
Q611	B1ABGC000001	TRANSISTOR	[M]
Q612	B1ABGC000001	TRANSISTOR	[M]
Q690	B1GFGCAA0001	TRANSISTOR	[M]
Q691	B1GDCFJA0001	TRANSISTOR	[M]
Q701	B1ADCF000001	TRANSISTOR	[M]
Q702	B1ADCF000001	TRANSISTOR	[M]
Q703	B1ADCF000001	TRANSISTOR	[M]
Q704	B1GBCFJA0002	TRANSISTOR	[M]
Q731	B1GDCFJJ0002	TRANSISTOR	[M]
Q732	KTA1046	TRANSISTOR	[M]
Q733	B1ABCF000011	TRANSISTOR	[M]
Q801	B1GBCFJN0004	TRANSISTOR	[M]
Q867	2SA1576A106R	TRANSISTOR	[M]
Q971	B1GBCFJN0004	TRANSISTOR	[M]
Q1001	B1GBCFJJ0007	TRANSISTOR	[M]
Q1003	B1GBCFJJ0007	TRANSISTOR	[M]
Q1004	B1GBCFJJ0007	TRANSISTOR	[M]
Q1005	B1GBCFJJ0007	TRANSISTOR	[M]
Q1008	B1ABCF000011	TRANSISTOR	[M]
Q1009	B1GDCFJJ0002	TRANSISTOR	[M]
Q1010	2SA1576A106R	TRANSISTOR	[M]
Q1091	2SC3940ARA	TRANSISTOR	[M]
Q2001	2SD1819A0L	TRANSISTOR	[M]
Q3111	2SB1218ARL	TRANSISTOR	[M]
Q3116	2SB1218ARL	TRANSISTOR	[M]
Q3121	2SB1218ARL	TRANSISTOR	[M]
Q3212	2SB1218ARL	TRANSISTOR	[M]
Q3217	2SB1218ARL	TRANSISTOR	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
Q3222	2SB1218ARL	TRANSISTOR	[M]
Q5111	B1BDBF000004	TRANSISTOR	[M]
Q5115	B1BDBF000004	TRANSISTOR	[M]
Q5271	UNR521100L	TRANSISTOR	[M]
Q6215	UNR521200L	TRANSISTOR	[M]
QR5221	UNR212100L	TRANSISTOR	[M]
		DIODES	
D11	1N5402BM21	DIODE	[M]
D12	1N5402BM21	DIODE	[M]
D13	1N5402BM21	DIODE	[M]
D14	1N5402BM21	DIODE	[M]
D19	B0BA8R700009	DIODE	[M]
D20	B0AACK000004	DIODE	[M]
D21	B0AACK000004	DIODE	[M]
D22	B0JCPC000004	DIODE	[M]
D23	B0BA7R200003	DIODE	[M]
D24	B0JCPC000004	DIODE	[M]
D25	B0BA7R200003	DIODE	[M]
D26	B0AACK000004	DIODE	[M]
D27	B0AACK000004	DIODE	[M]
D28	B0AACK000004	DIODE	[M]
D29	B0AACK000004	DIODE	[M]
D30	B0AACK000004	DIODE	[M]
D31	B0AACK000004	DIODE	[M]
D32	B0AACK000004	DIODE	[M]
D45	B0BA7R200003	DIODE	[M]
D51	B0BA01100004	DIODE	[M]
D52	B0EAKM000085	DIODE	[M]
D53	B0EAKM000085	DIODE	[M]
D61	B0AACK000004	DIODE	[M]
D62	B0AACK000004	DIODE	[M]
D63	B0AACK000004	DIODE	[M]
D71	B0BA02300017	DIODE	[M]
D72	B0EAKM000085	DIODE	[M]
D73	B0EAKM000085	DIODE	[M]
D74	B0EAKM000085	DIODE	[M]
D75	B0EAKM000085	DIODE	[M]
D76	B0EAKM000085	DIODE	[M]
D77	B0EAKM000085	DIODE	[M]
D151	B0BC5R000009	DIODE	[M]
D401	B0ACCK000005	DIODE	[M]
D402	B0ACCK000005	DIODE	[M]
D591	B0BC5R000009	DIODE	[M]
D617	B0BC4R300002	DIODE	[M]
D645	B0ACCK000005	DIODE	[M]
D646	B0ACCK000005	DIODE	[M]
D653	B0ACCK000005	DIODE	[M]
D654	B0ACCK000005	DIODE	[M]
D701	RL1N4003N02	DIODE	[M]
D711	B0ACCK000005	DIODE	[M]
D716	B0ACCK000005	DIODE	[M]
D717	B0ACCK000005	DIODE	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
D718	B0ACCK000005	DIODE	[M]
D719	B0ACCK000005	DIODE	[M]
D720	B0ACCK000005	DIODE	[M]
D721	B0ACCK000005	DIODE	[M]
D723	B0ACCK000005	DIODE	[M]
D729	B0ACCK000005	DIODE	[M]
D735	B0ADCC000002	DIODE	[M]
D757	RL1N4003N02	DIODE	[M]
D801	1SS380TE-17	DIODE	[M]
D802	1SS380TE-17	DIODE	[M]
D803	B0ACCK000005	DIODE	[M]
D815	MA2J72900L	DIODE	[M]
D901	B0ACCK000005	DIODE	[M]
D902	B0BC5R000009	DIODE	[M]
D911	B0ACCK000005	DIODE	[M]
D971	LNJ201LPQJA	DIODE	[M]
D1001	B0ACCK000005	DIODE	[M]
D1091	B0BC5R600003	DIODE	[M]
D2521	B0ECKM000003	DIODE	[M]
D5131	MA2J72800L	DIODE	[M]
D6215	MA2J72800L	DIODE	[M]
LB2501	J0JHC0000045	CHIP BEADS	[M]
LB2502	J0JHC0000045	CHIP BEADS	[M]
LB2503	J0JHC0000045	CHIP BEADS	[M]
LB3001	J0JHC0000045	CHIP BEADS	[M]
LB3002	J0JHC0000045	CHIP BEADS	[M]
LB3201	D0GB101JA002	100 1/16W	[M]
LB3202	D0GB101JA002	100 1/16W	[M]
LB3203	D0GB101JA002	100 1/16W	[M]
LB3205	J0JBC0000015	CHIP INDUCTOR	[M]
LB3206	J0JBC0000015	CHIP INDUCTOR	[M]
LB3207	J0JBC0000015	CHIP INDUCTOR	[M]
LB3208	J0JBC0000015	CHIP INDUCTOR	[M]
LB3209	J0JBC0000015	CHIP INDUCTOR	[M]
LB4200	J0JBC0000015	CHIP INDUCTOR	[M]
LB4201	J0JCC0000119	CHIP INDUCTOR	[M]
LB4207	J0JCC0000119	CHIP INDUCTOR	[M]
LB4208	J0JCC0000119	CHIP INDUCTOR	[M]
LB4209	J0JCC0000119	CHIP INDUCTOR	[M]
LB4210	J0JCC0000119	CHIP INDUCTOR	[M]
LB4211	J0JCC0000119	CHIP INDUCTOR	[M]
LB4212	J0JCC0000119	CHIP INDUCTOR	[M]
LB4214	ERJ3GEY0R00V	0 1/16W	[M]
LB4215	ERJ3GEY0R00V	0 1/16W	[M]
LB4218	ERJ3GEY0R00V	0 1/16W	[M]
LB5101	J0JHC0000045	CHIP BEADS	[M]
LB5102	J0JBC0000015	CHIP INDUCTOR	[M]
LB5103	J0JBC0000015	CHIP INDUCTOR	[M]
LB5202	J0JHC0000045	CHIP BEADS	[M]
LB5203	J0JHC0000045	CHIP BEADS	[M]
LB5205	J0JBC0000015	CHIP INDUCTOR	[M]
LB5206	J0JBC0000015	CHIP INDUCTOR	[M]
LB5208	J0JBC0000015	CHIP INDUCTOR	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
LB5209	J0JBC0000015	CHIP INDUCTOR	[M]
LB5210	J0JBC0000015	CHIP INDUCTOR	[M]
LB5213	J0JBC0000015	CHIP INDUCTOR	[M]
LB5217	J0JBC0000015	CHIP INDUCTOR	[M]
LB5218	J0JBC0000015	CHIP INDUCTOR	[M]
LB5219	J0JBC0000015	CHIP INDUCTOR	[M]
LB5221	J0JCC0000119	CHIP INDUCTOR	[M]
LB5222	J0JCC0000119	CHIP INDUCTOR	[M]
LB5223	J0JCC0000119	CHIP INDUCTOR	[M]
LB5224	J0JCC0000119	CHIP INDUCTOR	[M]
LB5225	J0JBC0000015	CHIP INDUCTOR	[M]
LB5226	J0JCC0000119	CHIP INDUCTOR	[M]
LB5227	J0JBC0000015	CHIP INDUCTOR	[M]
LB5228	J0JCC0000119	CHIP INDUCTOR	[M]
LB5229	J0JCC0000119	CHIP INDUCTOR	[M]
LB5230	J0JCC0000119	CHIP INDUCTOR	[M]
LB5231	J0JCC0000119	CHIP INDUCTOR	[M]
LB5232	J0JBC0000015	CHIP INDUCTOR	[M]
LB5233	J0JCC0000119	CHIP INDUCTOR	[M]
LB5235	J0JCC0000119	CHIP INDUCTOR	[M]
LB5236	J0JCC0000119	CHIP INDUCTOR	[M]
LB5237	J0JCC0000119	CHIP INDUCTOR	[M]
LB5238	J0JCC0000119	CHIP INDUCTOR	[M]
LB5239	J0JBC0000015	CHIP INDUCTOR	[M]
LB6201	J0JBC0000015	CHIP INDUCTOR	[M]
LB6202	J0JCC0000119	CHIP INDUCTOR	[M]
LB6221	J0JBC0000015	CHIP INDUCTOR	[M]
LB6561	J0JBC0000015	CHIP INDUCTOR	[M]
LB6562	J0JCC0000119	CHIP INDUCTOR	[M]
LB6563	J0JCC0000119	CHIP INDUCTOR	[M]
LB6564	ERJ3GEYJ470V	47 1/16W	[M]
LB6565	J0JCC0000077	CHIP BEEZ	[M]
LB6566	J0JCC0000119	CHIP INDUCTOR	[M]
LB6567	J0JBC0000015	CHIP INDUCTOR	[M]
		VARIABLE RESISTORS	
VR901	EVEKE2F3024M	VOLUME JOG	[M]
		SWITCHES	
S931	EVQ21405R	SW POWER	[M]
S932	EVQ21405R	SW OPEN/CLOSE	[M]
S933	EVQ21405R	SW F. SKIP	[M]
S934	EVQ21405R	SW PLAY	[M]
S935	EVQ21405R	SW PAUSE	[M]
S936	EVQ21405R	SW STOP	[M]
S937	EVQ21405R	SW R. SKIP	[M]
S938	EVQ21405R	SW SELECTOR	[M]
S939	EVQ21405R	SW RDS	[M]
S940	EVQ21405R	SW SFC	[M]
S941	EVQ21405R	SW S. WOOFER	[M]
SW2501	RSH1A044-1A	SW OPEN	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
SW2502	RSH1A044-1A	SW CLOSE	[M]
		CONNECTORS	
CN51	K1KA04A00105	LEAF SW 4P POST	[M]
CN52A	K1MN21A00011	CONNECTOR	[M]
CN52B	K1MN21A00011	CONNECTOR	[M]
CN53A	K1MN17A00025	CONNECTOR	[M]
CN401	K1MN26A00022	CONNECTOR	[M]
CN402	K1MP07A00005	CONNECTOR	[M]
CN403	RJS2A5607	7P FFC CON	[M]
CN404	K1KA11A00093	11P CONNECTOR	[M]
CN405	K1KB11A00020	CONNECTOR	[M]
CN601	K1KA04B00057	4P CONNECTOR	[M]
CN602	K1KB11A00020	CONNECTOR	[M]
CN603	K1KB11A00020	CONNECTOR	[M]
CN901A	K1MN22A00027	22P FFC CONNECTOR	[M]
CN901B	K1MN22A00027	22P FFC CONNECTOR	[M]
CN902A	K1MN08A00017	8P CONNECTOR	[M]
CN902B	K1MN08C00001	8P CONNECTOR	[M]
CN903A	K1MN08A00017	8P CONNECTOR	[M]
CN903B	K1MN08C00001	8P CONNECTOR	[M]
CN1001	K1MN15A00018	CONNECTOR	[M]
CP101	K1KA11A00093	11P CONNECTOR	[M]
CP602	K1KA11A00093	11P CONNECTOR	[M]
CP603	K1KA11A00093	11P CONNECTOR	[M]
		COILS	
L11	J0JKB0000020	EMI BEAD CORE	[M]
L12	J0JKB0000020	EMI BEAD CORE	[M]
L13	G0ZZ00001930	COIL	[M]
L14	G0A200D00002	COIL	[M]
L15	G0ZZ00001930	COIL	[M]
L16	G0A200D00002	COIL	[M]
L17	G0A200D00002	COIL	[M]
L51	G0C101JA0030	INDUCTOR	[M]
L151	J0JBC0000041	CHIP INDUCTOR	[M]
L152	J0JBC0000041	CHIP INDUCTOR	[M]
L153	J0JBC0000041	CHIP INDUCTOR	[M]
L521	J0JBC0000041	CHIP INDUCTOR	[M]
L540	G0A200D00002	COIL	[M]
L541	J0JBC0000041	CHIP INDUCTOR	[M]
L545	J0JBC0000041	CHIP INDUCTOR	[M]
L595	G0C100JA0030	INDUCTOR	[M]
L596	G0A200D00002	COIL	[M]
L801	J0JBC0000041	CHIP INDUCTOR	[M]
L802	J0JBC0000041	CHIP INDUCTOR	[M]
L991	RLQB101KTA-Y	CHOKE COIL	[M]
L992	RLQB101KTA-Y	CHOKE COIL	[M]
L993	J0JBC0000019	CHIP INDUCTOR	[M]
L994	J0JBC0000019	CHIP INDUCTOR	[M]
L1067	G0BYYYY00016	COMMON MODE CHOKE	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
L1068	G0BYYYY00016	COMMON MODE CHOKE	[M]
L2001	G1C100K00020	CHIP INDUCTOR	[M]
L2002	G1C100K00020	CHIP INDUCTOR	[M]
L2021	G1C100K00020	CHIP INDUCTOR	[M]
L3001	G1C100K00020	CHIP INDUCTOR	[M]
L3091	G1C100K00020	CHIP INDUCTOR	[M]
L3212	G1C4R7J00008	CONDENSOR	[M]
L3213	G1C4R7J00008	CONDENSOR	[M]
L3216	G1C4R7J00008	CONDENSOR	[M]
L3217	G1C4R7J00008	CONDENSOR	[M]
L3221	G1C4R7J00008	CONDENSOR	[M]
L3222	G1C4R7J00008	CONDENSOR	[M]
L4211	G1C220KA0038	CHIP CAPACITOR	[M]
L5110	G1C100K00020	CHIP INDUCTOR	[M]
L5201	G1C100K00020	CHIP INDUCTOR	[M]
L5202	G1C100K00020	CHIP INDUCTOR	[M]
L6561	G1C220KA0038	CHIP CAPACITOR	[M]
L6562	G1C220KA0038	CHIP CAPACITOR	[M]
		COMPONENT COMBINATION	
Z901	B3RAD0000035	INFRARED RAY	[M]
Z1063	J0JBC0000015	CHIP INDUCTOR	[M]
Z1064	J0JBC0000015	CHIP INDUCTOR	[M]
Z1065	J0JBC0000015	CHIP INDUCTOR	[M]
Z1066	J0JBC0000015	CHIP INDUCTOR	[M]
Z1067	J0JBC0000015	CHIP INDUCTOR	[M]
Z1068	J0JBC0000015	CHIP INDUCTOR	[M]
Z1069	J0JBC0000015	CHIP INDUCTOR	[M]
		OSCILLATORS	
X151	H0H433400001	CRYSTAL	[M]
X501	RSXZ36M8M01T	36.86 MHZ RESONATOR	[M]
X801	H2B100500004	CERAMIC RESONATORS	[M]
X6561	H0J368600003	CRYSTAL	[M]
		DISPLAY TUBE	
FL901	A2BD00000066	FLUORESCENT CHAR.	[M]
FL4201	F1H0J1050018	1 6.3V	[M]
FL6251	F1H0J1050018	1 6.3V	[M]
FL6253	F1H0J1050018	1 6.3V	[M]
FL6254	F1H0J1050018	1 6.3V	[M]
FL6255	F1J1E1040022	0.1 25V	[M]
		HOLDERS	
H7	RMY0313	HEAT SINK	[M]
H11	K1YF04000001	CABLE HOLDER	[M]
H402	RMR0316	7P CABLE HOLDER	[M]
H601	RMR0313	4P CABLE HOLDER	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
		FUSE PROTECTOR	
FP71	K5G202AA0002	FUSE PROTECTOR	[M] ⚠
FP2501	K1MN15B00041	CONNECTOR	[M]
FP2503	K1MN07B00080	CONNECTOR	[M]
FP3202	K1MN17B00041	CONNECTOR	[M]
FP3203	K1MN15B00037	CONNECTOR	[M]
FP4202	K1MN26B00037	CONNECTOR	[M]
FP5101	K1MN30B00031	CONNECTOR	[M]
FP5102	K1MN50B00021	CONNECTOR	[M]
FP5201	K1MN50B00010	CONNECTOR	[M]
		JACKS	
JK401	K2HA202B0037	JK TV	[M]
JK402	K2HA202B0037	JK VCR/AUX IN	[M]
JK700	K1FB125B0097	JK SYSTEM CONNECTOR	[M]
JK901	RJJ37TK07-X	JK HP/MIC	[M]
JK1001	K1U208B00003	JK 8P WIRE HOLDER	[M]
JK1002	K1FB121B0004	JK AV	[M]
		EARTH TERMINAL	
E1	K4CZ01000027	TERMINALS	[M]
E700	K4CZ01000027	TERMINALS	[M]
E900	K4CZ01000027	TERMINALS	[M]
		RESISTORS	
R3	ERJ3GEY0R00V	0 1/16W	[M]
R11	ERDS2TJ223T	22K 1/4W	[M]
R12	ERDS2TJ102T	1K 1/4W	[M]
R13	ERDS2TJ331T	330 1/4W	[M]
R15	ERDS2TJ471T	470 1/4W	[M]
R17	ERDS2TJ223T	22K 1/4W	[M]
R18	ERDS2TJ102T	1K 1/4W	[M]
R19	ERDS2TJ1R0T	1 1/4W	[M]
R20	ERDS2TJ1R0T	1 1/4W	[M]
R21	ERDS2TJ1R0T	1 1/4W	[M]
R23	ERDS2TJ102T	1K 1/4W	[M]
R24	ERDS2TJ822T	8.2K 1/4W	[M]
R25	ERDS2TJ102T	1K 1/4W	[M]
R26	ERDS2TJ102T	1K 1/4W	[M]
R27	ERDS2TJ182T	1.8K 1/4W	[M]
R28	ERDS2TJ472T	4.7K 1/4W	[M]
R29	ERDS2TJ271T	270 1/4W	[M]
R31	ERDS2TJ681T	680 1/4W	[M]
R32	ERDS2TJ472T	4.7K 1/4W	[M]
R34	ERDS2TJ681T	680 1/4W	[M]
R35	ERDS2TJ271T	270 1/4W	[M]
R41	ERDS1FVJ2R2T	2.2 1/2W	[M]
R42	ERDS1FVJ392T	3.9K 1/2W	[M]
R43	ERDS2TJ151T	150 1/4W	[M]
R44	ERDS2TJ153T	15K 1/4W	[M]

R44	ERDS2TJ153T	15K 1/4W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R45	ERDS2TJ272T	2.7K 1/4W	[M]
R47	ERDS1FVJ2R2T	2.2 1/2W	[M]
R48	ERDS2TJ472T	4.7K 1/4W	[M]
R49	ERDS2TJ153T	15K 1/4W	[M]
R50	ERDS2TJ152T	1.5K 1/4W	[M]
R61	ERDS1FVJ561T	560 1/2W	[M]
R62	ERDS2TJ154T	150K 1/4W	[M]
R71	ERDS2TJ472T	4.7K 1/4W	[M]
R72	ERDS2TJ223T	22K 1/4W	[M]
R101	ERJ3GEYJ102V	1K 1/16W	[M]
R102	ERJ3GEYJ102V	1K 1/16W	[M]
R103	ERJ3GEYJ103V	10K 1/16W	[M]
R104	ERJ3GEYJ103V	10K 1/16W	[M]
R151	D0GB121JA002	120 1/16W	[M]
R152	ERJ3GEYJ102V	1K 1/16W	[M]
R153	ERJ3GEYJ102V	1K 1/16W	[M]
R156	ERJ3GEYJ103V	10K 1/16W	[M]
R157	ERJ3GEYJ102V	1K 1/16W	[M]
R158	ERJ3GEYJ102V	1K 1/16W	[M]
R159	ERJ3GEYJ102V	1K 1/16W	[M]
R401	ERJ3GEYJ153V	15K 1/16W	[M]
R402	ERJ3GEYJ153V	15K 1/16W	[M]
R403	ERJ3GEYJ222V	2.2K 1/16W	[M]
R404	ERJ3GEYJ222V	2.2K 1/16W	[M]
R413	ERJ3GEYJ682V	6.8K 1/16W	[M]
R414	ERJ3GEYJ682V	6.8K 1/16W	[M]
R415	D0GB332JA002	3.3K 1/16W	[M]
R416	D0GB332JA002	3.3K 1/16W	[M]
R417	ERJ3GEYJ682V	6.8K 1/16W	[M]
R418	D0GB332JA002	3.3K 1/16W	[M]
R422	ERJ3GEYJ222V	2.2K 1/16W	[M]
R423	ERJ3GEYJ153V	15K 1/16W	[M]
R429	ERJ3GEYJ103V	10K 1/16W	[M]
R430	ERJ3GEYJ103V	10K 1/16W	[M]
R431	ERJ3GEYJ682V	6.8K 1/16W	[M]
R432	ERJ3GEYJ682V	6.8K 1/16W	[M]
R433	D0GB272JA002	2.7K 1/16W	[M]
R434	D0GB272JA002	2.7K 1/16W	[M]
R435	ERJ3GEYJ123V	12K 1/16W	[M]
R436	ERJ3GEYJ123V	12K 1/16W	[M]
R437	D0GB393JA002	39K 1/16W	[M]
R438	D0GB393JA002	39K 1/16W	[M]
R439	ERJ3GEYJ102V	1K 1/16W	[M]
R440	ERJ3GEYJ102V	1K 1/16W	[M]
R443	ERJ3GEYJ103V	10K 1/16W	[M]
R444	ERJ3GEYJ103V	10K 1/16W	[M]
R445	ERJ3GEYJ104V	100K 1/16W	[M]
R446	ERJ3GEYJ104V	100K 1/16W	[M]
R447	ERJ3GEYJ104V	100K 1/16W	[M]
R448	ERJ3GEYJ104V	100K 1/16W	[M]
R449	ERJ3GEYJ104V	100K 1/16W	[M]
R450	ERJ3GEYJ104V	100K 1/16W	[M]
R451	ERJ3GEYJ104V	100K 1/16W	[M]
R453	ERJ3GEYJ102V	1K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R454	ERJ3GEYJ102V	1K 1/16W	[M]
R455	ERJ3GEYJ102V	1K 1/16W	[M]
R489	ERJ3GEYJ822V	8.2K 1/16W	[M]
R490	ERJ3GEYJ822V	8.2K 1/16W	[M]
R491	ERJ3GEYJ103V	10K 1/16W	[M]
R492	ERJ3GEYJ103V	10K 1/16W	[M]
R493	ERJ3GEYJ822V	8.2K 1/16W	[M]
R494	ERJ3GEYJ822V	8.2K 1/16W	[M]
R495	ERJ3GEYJ103V	10K 1/16W	[M]
R496	ERJ3GEYJ103V	10K 1/16W	[M]
R501	ERJ3GEYJ102V	1K 1/16W	[M]
R502	ERJ3GEYJ102V	1K 1/16W	[M]
R503	ERJ3GEYJ102V	1K 1/16W	[M]
R504	ERJ3GEYJ102V	1K 1/16W	[M]
R505	ERJ3GEYJ102V	1K 1/16W	[M]
R506	ERJ3GEYJ102V	1K 1/16W	[M]
R507	ERJ3GEYJ102V	1K 1/16W	[M]
R508	ERJ3GEYJ102V	1K 1/16W	[M]
R516	ERJ3GEYJ470V	47 1/16W	[M]
R517	D0GB105JA002	1M 1/16W	[M]
R518	ERJ3GEYJ221V	220 1/16W	[M]
R521	D0GB271JA002	270 1/16W	[M]
R522	D0GB271JA002	270 1/16W	[M]
R537	D0GB271JA002	270 1/16W	[M]
R538	D0GB271JA002	270 1/16W	[M]
R541	ERJ3GEYJ472V	4.7K 1/16W	[M]
R542	ERJ3GEYJ104V	100K 1/16W	[M]
R543	D0GB331JA002	330 1/16W	[M]
R544	D0GB331JA002	330 1/16W	[M]
R545	D0GB331JA002	330 1/16W	[M]
R551	ERJ3GEYJ103V	10K 1/16W	[M]
R552	ERJ3GEYJ103V	10K 1/16W	[M]
R553	D0GB272JA002	2.7K 1/16W	[M]
R554	D0GB272JA002	2.7K 1/16W	[M]
R555	ERJ3GEYJ123V	12K 1/16W	[M]
R556	ERJ3GEYJ123V	12K 1/16W	[M]
R559	D0GB392JA002	3.9K 1/16W	[M]
R560	D0GB392JA002	3.9K 1/16W	[M]
R561	ERJ3GEYJ103V	10K 1/16W	[M]
R562	ERJ3GEYJ103V	10K 1/16W	[M]
R565	ERJ3GEYJ103V	10K 1/16W	[M]
R567	ERJ3GEYJ471V	470 1/16W	[M]
R568	D0GB332JA002	3.3K 1/16W	[M]
R571	ERJ3GEYJ222V	2.2K 1/16W	[M]
R572	ERJ3GEYJ123V	12K 1/16W	[M]
R575	ERJ3GEYJ223V	22K 1/16W	[M]
R576	ERJ3GEYJ223V	22K 1/16W	[M]
R578	ERJ3GEYJ222V	2.2K 1/16W	[M]
R579	ERJ3GEYJ222V	2.2K 1/16W	[M]
R580	ERJ3GEYJ472V	4.7K 1/16W	[M]
R581	ERJ3GEYJ473V	47K 1/16W	[M]
R582	ERJ3GEYJ473V	47K 1/16W	[M]
R583	ERJ3GEYJ473V	47K 1/16W	[M]
R584	ERJ3GEYJ102V	1K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R585	ERJ3GEYJ102V	1K 1/16W	[M]
R586	ERJ3GEYJ102V	1K 1/16W	[M]
R591	ERJ3GEYJ391V	390 1/16W	[M]
R592	ERJ3GEYJ473V	47K 1/16W	[M]
R593	ERJ3GEYJ473V	47K 1/16W	[M]
R594	ERJ3GEYJ473V	47K 1/16W	[M]
R595	ERJ3GEYJ102V	1K 1/16W	[M]
R601	D0GB122JA019	1.2K 1/16W	[M]
R602	D0GB122JA019	1.2K 1/16W	[M]
R603	ERJ3GEYJ471V	470 1/16W	[M]
R604	ERJ3GEYJ471V	470 1/16W	[M]
R605	ERJ3GEYJ223V	22K 1/16W	[M]
R606	ERJ3GEYJ223V	22K 1/16W	[M]
R607	D0GB332JA002	3.3K 1/16W	[M]
R608	D0GB332JA002	3.3K 1/16W	[M]
R609	ERJ3GEYJ823V	82K 1/16W	[M]
R610	ERJ3GEYJ823V	82K 1/16W	[M]
R611	D0GB392JA002	3.9K 1/16W	[M]
R612	D0GB392JA002	3.9K 1/16W	[M]
R613	ERJ3GEYJ182V	1.8K 1/16W	[M]
R614	ERJ3GEYJ182V	1.8K 1/16W	[M]
R615	ERJ3GEYJ102V	1K 1/16W	[M]
R616	ERJ3GEYJ102V	1K 1/16W	[M]
R617	ERJ3GEYJ103V	10K 1/16W	[M]
R618	ERJ3GEYJ103V	10K 1/16W	[M]
R619	ERJ3GEYJ223V	22K 1/16W	[M]
R620	ERJ3GEYJ223V	22K 1/16W	[M]
R621	D0GB183JA002	18K 1/16W	[M]
R622	D0GB183JA002	18K 1/16W	[M]
R623	ERJ3GEYJ223V	22K 1/16W	[M]
R624	ERJ3GEYJ223V	22K 1/16W	[M]
R625	ERJ3GEYJ123V	12K 1/16W	[M]
R626	ERJ3GEYJ103V	10K 1/16W	[M]
R627	D0GB393JA002	39K 1/16W	[M]
R628	D0GB393JA002	39K 1/16W	[M]
R629	ERJ3GEYJ682V	6.8K 1/16W	[M]
R631	D0GB390JA002	39 1/16W	[M]
R632	D0GB390JA002	39 1/16W	[M]
R633	D0GB390JA002	39 1/16W	[M]
R634	D0GB390JA002	39 1/16W	[M]
R635	D0GB100JA002	10 1/16W	[M]
R636	D0GB100JA002	10 1/16W	[M]
R639	ERJ3GEYJ561V	560 1/16W	[M]
R640	ERJ3GEYJ561V	560 1/16W	[M]
R641	D0GB333JA002	33K 1/16W	[M]
R642	D0GB333JA002	33K 1/16W	[M]
R643	D0GB333JA002	33K 1/16W	[M]
R644	D0GB333JA002	33K 1/16W	[M]
R645	ERJ3GEYJ822V	8.2K 1/16W	[M]
R646	ERJ3GEYJ822V	8.2K 1/16W	[M]
R647	ERJ3GEYJ473V	47K 1/16W	[M]
R648	ERJ3GEYJ473V	47K 1/16W	[M]
R649	ERJ3GEYJ102V	1K 1/16W	[M]
R650	ERJ3GEYJ102V	1K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R651	ERJ3GEYJ153V	15K 1/16W	[M]
R652	ERJ3GEYJ104V	100K 1/16W	[M]
R653	D0GB273JA002	27K 1/16W	[M]
R654	ERJ3GEYJ824V	820K 1/16W	[M]
R655	D0GB273JA002	27K 1/16W	[M]
R656	D0GB273JA002	27K 1/16W	[M]
R657	ERJ3GEYJ103V	10K 1/16W	[M]
R658	ERJ3GEYJ103V	10K 1/16W	[M]
R660	ERJ3GEYJ472V	4.7K 1/16W	[M]
R661	ERJ3GEYJ153V	15K 1/16W	[M]
R662	ERJ3GEYJ102V	1K 1/16W	[M]
R663	ERJ3GEYJ823V	82K 1/16W	[M]
R664	ERJ3GEYJ823V	82K 1/16W	[M]
R665	ERJ3GEYJ822V	8.2K 1/16W	[M]
R666	ERJ3GEYJ153V	15K 1/16W	[M]
R667	D0GB274JA002	270K 1/16W	[M]
R669	ERJ3GEYJ561V	560 1/16W	[M]
R670	ERJ3GEYJ561V	560 1/16W	[M]
R671	ERJ3GEYJ472V	4.7K 1/16W	[M]
R672	ERJ3GEYJ472V	4.7K 1/16W	[M]
R673	ERJ3GEYJ473V	47K 1/16W	[M]
R674	ERJ3GEYJ473V	47K 1/16W	[M]
R675	ERJ3GEYJ102V	1K 1/16W	[M]
R676	ERJ3GEYJ102V	1K 1/16W	[M]
R677	D0GB273JA002	27K 1/16W	[M]
R678	D0GB273JA002	27K 1/16W	[M]
R681	D0GB332JA002	3.3K 1/16W	[M]
R682	ERJ3GEYJ682V	6.8K 1/16W	[M]
R685	D0GB393JA002	39K 1/16W	[M]
R686	D0GB563JA002	56K 1/16W	[M]
R687	ERJ3GEYJ222V	2.2K 1/16W	[M]
R688	D0GB273JA002	27K 1/16W	[M]
R689	D0GB392JA002	3.9K 1/16W	[M]
R690	D0GB273JA002	27K 1/16W	[M]
R691	ERJ3GEYJ473V	47K 1/16W	[M]
R693	ERJ3GEYJ102V	1K 1/16W	[M]
R694	ERJ3GEYJ102V	1K 1/16W	[M]
R695	ERJ3GEYJ102V	1K 1/16W	[M]
R696	D0GB122JA019	1.2K 1/16W	[M]
R697	ERJ3GEYJ102V	1K 1/16W	[M]
R698	ERJ3GEYJ102V	1K 1/16W	[M]
R699	ERJ3GEYJ221V	220 1/16W	[M]
R701	ERJ3GEYJ102V	1K 1/16W	[M]
R702	ERJ3GEYJ102V	1K 1/16W	[M]
R703	D0GB183JA002	18K 1/16W	[M]
R704	D0GB183JA002	18K 1/16W	[M]
R705	ERJ3GEYJ223V	22K 1/16W	[M]
R706	ERJ3GEYJ223V	22K 1/16W	[M]
R709	ERJ3GEYJ103V	10K 1/16W	[M]
R710	ERJ3GEYJ103V	10K 1/16W	[M]
R711	ERJ3GEYJ104V	100K 1/16W	[M]
R712	ERJ3GEYJ104V	100K 1/16W	[M]
R717	ERJ3GEYJ682V	6.8K 1/16W	[M]
R719	ERJ3GEYJ472V	4.7K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R720	ERDS1FVJ681T	680 1/2W	[M]
R723	ERJ3GEYJ224V	220K 1/16W	[M]
R724	D0GB683JA002	68K 1/16W	[M]
R725	ERJ3GEYJ102V	1K 1/16W	[M]
R726	ERJ3GEYJ153V	15K 1/16W	[M]
R727	D0GB333JA002	33K 1/16W	[M]
R728	ERJ3GEYJ472V	4.7K 1/16W	[M]
R729	ERJ3GEYJ103V	10K 1/16W	[M]
R730	ERJ3GEYJ472V	4.7K 1/16W	[M]
R734	D0GB332JA002	3.3K 1/16W	[M]
R735	D0GB124JA002	120K 1/16W	[M]
R736	ERJ3GEYJ681V	680 1/16W	[M]
R737	ERJ3GEYJ3R9V	3.9 1/16W	[M]
R738	ERJ3GEYJ3R9V	3.9 1/16W	[M]
R739	ERJ3GEYJ3R9V	3.9 1/16W	[M]
R740	ERJ3GEYJ3R9V	3.9 1/16W	[M]
R791	ERDS1FVJ5R6T	5.6 1/2W	[M]
R797	ERJ3GEYJ103V	10K 1/16W	[M]
R798	D0GB272JA002	2.7K 1/16W	[M]
R799	ERJ3GEYJ472V	4.7K 1/16W	[M]
R801	ERJ3GEYJ221V	220 1/16W	[M]
R802	ERJ3GEYJ221V	220 1/16W	[M]
R803	ERJ3GEYJ473V	47K 1/16W	[M]
R804	D0GB683JA002	68K 1/16W	[M]
R805	ERJ3GEYJ221V	220 1/16W	[M]
R806	ERJ3GEYJ221V	220 1/16W	[M]
R807	ERJ3GEYJ221V	220 1/16W	[M]
R809	ERJ3GEYJ102V	1K 1/16W	[M]
R810	D0GB1R0JA002	1 1/16W	[M]
R811	ERJ3GEYJ103V	10K 1/16W	[M]
R812	ERJ3GEYJ103V	10K 1/16W	[M]
R813	ERJ3GEYJ102V	1K 1/16W	[M]
R814	ERJ3GEYJ223V	22K 1/16W	[M]
R815	ERJ3GEYJ681V	680 1/16W	[M]
R816	ERJ3GEYJ103V	10K 1/16W	[M]
R817	ERJ3GEYJ221V	220 1/16W	[M]
R818	ERJ3GEYJ102V	1K 1/16W	[M]
R819	ERJ3GEYJ103V	10K 1/16W	[M]
R820	ERJ3GEYJ103V	10K 1/16W	[M]
R821	ERJ3GEYJ103V	10K 1/16W	[M]
R822	D0GB101JA002	100 1/16W	[M]
R823	ERJ3GEYJ221V	220 1/16W	[M]
R824	ERJ3GEYJ221V	220 1/16W	[M]
R825	ERJ3GEYJ221V	220 1/16W	[M]
R826	ERJ3GEYJ103V	10K 1/16W	[M]
R828	ERJ3GEYJ681V	680 1/16W	[M]
R829	ERJ3GEYJ681V	680 1/16W	[M]
R830	ERJ3GEYJ681V	680 1/16W	[M]
R831	ERJ3GEYJ221V	220 1/16W	[M]
R832	ERJ3GEYJ221V	220 1/16W	[M]
R833	ERJ3GEYJ221V	220 1/16W	[M]
R834	ERJ3GEYJ221V	220 1/16W	[M]
R836	ERJ3GEYJ221V	220 1/16W	[M]
R837	ERJ3GEYJ221V	220 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R838	D0GB331JA002	330 1/16W	[M]
R839	ERJ3GEYJ221V	220 1/16W	[M]
R840	ERJ3GEYJ221V	220 1/16W	[M]
R841	ERJ3GEYJ221V	220 1/16W	[M]
R842	ERJ3GEYJ221V	220 1/16W	[M]
R843	D0GB331JA002	330 1/16W	[M]
R844	ERJ3GEYJ102V	1K 1/16W	[M]
R845	ERJ3GEYJ102V	1K 1/16W	[M]
R846	ERJ3GEYJ102V	1K 1/16W	[M]
R847	ERJ3GEYJ102V	1K 1/16W	[M]
R848	D0GB333JA002	33K 1/16W	[M]
R849	D0GB333JA002	33K 1/16W	[M]
R850	D0GB333JA002	33K 1/16W	[M]
R851	ERJ3GEYJ223V	22K 1/16W	[M]
R852	ERJ3GEYJ223V	22K 1/16W	[M]
R853	ERJ3GEYJ472V	4.7K 1/16W	[M]
R854	ERJ3GEYJ104V	100K 1/16W	[M]
R855	ERJ3GEYJ102V	1K 1/16W	[M]
R856	ERJ3GEYJ102V	1K 1/16W	[M]
R857	ERJ3GEYJ102V	1K 1/16W	[M]
R858	D0GB821JA002	820 1/16W	[M]
R859	D0GB1R0JA002	1 1/16W	[M]
R860	ERJ3GEYJ182V	1.8K 1/16W	[M]
R861	ERJ3GEYJ103V	10K 1/16W	[M]
R863	ERJ3GEYJ103V	10K 1/16W	[M]
R864	D0GB821JA002	820 1/16W	[M]
R865	D0GB331JA002	330 1/16W	[M]
R866	D0GB331JA002	330 1/16W	[M]
R867	ERJ3GEYJ103V	10K 1/16W	[M]
R868	D0GB331JA002	330 1/16W	[M]
R869	D0GB331JA002	330 1/16W	[M]
R870	ERJ3GEYJ221V	220 1/16W	[M]
R872	D0GB331JA002	330 1/16W	[M]
R873	D0GB331JA002	330 1/16W	[M]
R874	D0GB331JA002	330 1/16W	[M]
R875	D0GB331JA002	330 1/16W	[M]
R876	ERJ3GEYJ221V	220 1/16W	[M]
R877	ERJ3GEYJ221V	220 1/16W	[M]
R878	ERJ3GEYJ221V	220 1/16W	[M]
R879	ERJ3GEYJ221V	220 1/16W	[M]
R880	D0GB331JA002	330 1/16W	[M]
R881	D0GB331JA002	330 1/16W	[M]
R882	D0GB331JA002	330 1/16W	[M]
R883	ERJ3GEYJ223V	22K 1/16W	[M]
R884	ERJ3GEYJ104V	100K 1/16W	[M]
R886	ERJ3GEYJ102V	1K 1/16W	[M]
R887	ERJ3GEYJ102V	1K 1/16W	[M]
R888	ERJ3GEYJ102V	1K 1/16W	[M]
R889	ERJ3GEYJ102V	1K 1/16W	[M]
R890	ERJ3GEYJ221V	220 1/16W	[M]
R891	ERJ3GEYJ221V	220 1/16W	[M]
R892	ERJ3GEYJ221V	220 1/16W	[M]
R893	ERJ3GEYJ223V	22K 1/16W	[M]
R894	ERJ3GEYJ472V	4.7K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R895	D0GB101JA002	100 1/16W	[M]
R896	ERJ3GEYJ221V	220 1/16W	[M]
R897	ERJ3GEYJ103V	10K 1/16W	[M]
R898	ERJ3GEYJ222V	2.2K 1/16W	[M]
R899	ERJ3GEYJ222V	2.2K 1/16W	[M]
R901	D0GB151JA008	150 1/16W	[M]
R902	D0GB151JA008	150 1/16W	[M]
R911	D0GB332JA002	3.3K 1/16W	[M]
R912	D0GB332JA002	3.3K 1/16W	[M]
R913	D0GB332JA002	3.3K 1/16W	[M]
R914	ERJ3GEYJ223V	22K 1/16W	[M]
R915	D0GB333JA002	33K 1/16W	[M]
R916	D0GB333JA002	33K 1/16W	[M]
R917	D0GB333JA002	33K 1/16W	[M]
R918	ERJ3GEYJ103V	10K 1/16W	[M]
R931	D0GB821JA002	820 1/16W	[M]
R932	ERJ3GEYJ102V	1K 1/16W	[M]
R933	D0GB122JA019	1.2K 1/16W	[M]
R934	D0GB152JA002	1.5K 1/16W	[M]
R935	ERJ3GEYJ182V	1.8K 1/16W	[M]
R936	ERJ3GEYJ222V	2.2K 1/16W	[M]
R937	D0GB332JA002	3.3K 1/16W	[M]
R938	ERJ3GEYJ472V	4.7K 1/16W	[M]
R939	ERJ3GEYJ682V	6.8K 1/16W	[M]
R940	ERJ3GEYJ123V	12K 1/16W	[M]
R961	ERJ3GEYJ102V	1K 1/16W	[M]
R971	ERJ3GEYJ471V	470 1/16W	[M]
R1005	ERJ3GEYJ222V	2.2K 1/16W	[M]
R1009	ERJ3EKF75R0V	75 3W	[M]
R1010	ERJ3EKF75R0V	75 3W	[M]
R1011	ERJ3EKF75R0V	75 3W	[M]
R1012	ERJ3EKF75R0V	75 3W	[M]
R1023	D0GB183JA002	18K 1/16W	[M]
R1024	ERJ3GEYJ223V	22K 1/16W	[M]
R1025	ERJ3GEYJ223V	22K 1/16W	[M]
R1026	ERJ3GEYJ472V	4.7K 1/16W	[M]
R1027	ERJ3GEYJ472V	4.7K 1/16W	[M]
R1028	ERJ3GEYJ471V	470 1/16W	[M]
R1031	ERJ3GEYJ103V	10K 1/16W	[M]
R1032	ERJ3GEYJ103V	10K 1/16W	[M]
R1033	ERJ3GEYJ822V	8.2K 1/16W	[M]
R1034	ERJ3GEYJ822V	8.2K 1/16W	[M]
R1054	ERJ3GEYJ222V	2.2K 1/16W	[M]
R1073	ERJ3EKF75R0V	75 3W	[M]
R1074	ERJ3EKF75R0V	75 3W	[M]
R1075	ERJ3EKF75R0V	75 3W	[M]
R1076	ERJ3EKF75R0V	75 3W	[M]
R1077	ERJ3EKF75R0V	75 3W	[M]
R1078	ERJ3EKF75R0V	75 3W	[M]
R1079	D0GB1R0JA002	1 1/16W	[M]
R1080	D0GB1R0JA002	1 1/16W	[M]
R1081	ERJ3EKF75R0V	75 3W	[M]
R1082	D0GB1R0JA002	1 1/16W	[M]
R1083	D0GB1R0JA002	1 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R1084	ERJ3EKF75R0V	75 3W	[M]
R1085	ERJ3EKF75R0V	75 3W	[M]
R1091	ERDS1FVJ4R7T	4.7 1/2W	[M]
R1092	ERJ3GEYJ102V	1K 1/16W	[M]
R2021	ERJ3GEYJ473V	47K 1/16W	[M]
R2022	ERJ3GEYJ223V	22K 1/16W	[M]
R2023	D0GB752JA008	7.5K 1/16W	[M]
R2025	ERJ3GEYJ223V	22K 1/16W	[M]
R2026	ERJ3GEYJ223V	22K 1/16W	[M]
R2027	D0GB563JA002	56K 1/16W	[M]
R2028	D0GB563JA002	56K 1/16W	[M]
R2029	ERJ3GEYJ103V	10K 1/16W	[M]
R2030	ERJ3GEYJ102V	1K 1/16W	[M]
R2031	ERJ3GEYJ561V	560 1/16W	[M]
R2032	ERJ3GEYJ103V	10K 1/16W	[M]
R2033	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2034	ERJ3GEYJ473V	47K 1/16W	[M]
R2035	D0GB272JA002	2.7K 1/16W	[M]
R2036	ERJ3GEY0R00V	0 1/16W	[M]
R2037	D0GB683JA002	68K 1/16W	[M]
R2038	ERJ3GEYJ153V	15K 1/16W	[M]
R2039	D0GB105JA002	1M 1/16W	[M]
R2040	ERJ3GEYJ822V	8.2K 1/16W	[M]
R2041	ERJ3GEYJ822V	8.2K 1/16W	[M]
R2042	ERJ3GEYJ153V	15K 1/16W	[M]
R2043	ERJ3GEYJ153V	15K 1/16W	[M]
R2044	ERJ3GEYJ153V	15K 1/16W	[M]
R2045	ERJ3GEYJ153V	15K 1/16W	[M]
R2046	ERJ3GEYJ153V	15K 1/16W	[M]
R2047	ERJ3GEYJ153V	15K 1/16W	[M]
R2048	D0GB475JA008	4.7M 1/16W	[M]
R2049	ERJ3GEYJ102V	1K 1/16W	[M]
R2051	D0GB101JA002	100 1/16W	[M]
R2052	D0GB101JA002	100 1/16W	[M]
R2053	ERJ3GEYJ473V	47K 1/16W	[M]
R2054	ERJ3GEYJ473V	47K 1/16W	[M]
R2501	D0GB101JA002	100 1/16W	[M]
R2502	D0GB101JA002	100 1/16W	[M]
R2503	ERJ3GEY0R00V	0 1/16W	[M]
R2504	ERJ14YKR39H	0.39 1/4W	[M]
R2521	D0GF6R8JA017	6.8 1/16W	[M]
R2522	ERJ3GEY0R00V	0 1/16W	[M]
R2523	ERJ3GEY0R00V	0 1/16W	[M]
R2524	ERJ3GEY0R00V	0 1/16W	[M]
R3001	D0GB220JA002	22 1/16W	[M]
R3004	ERJ3RBD223V	22K 3W	[M]
R3005	ERJ3RBD751V	750 3W	[M]
R3006	ERJ3RBD153V	15K 3W	[M]
R3007	ERJ3RBD202V	2K 3W	[M]
R3008	ERJ3RBD132V	1.3K 3W	[M]
R3009	D0GB101JA002	100 1/16W	[M]
R3010	D0GB101JA002	100 1/16W	[M]
R3051	D0GB101JA002	100 1/16W	[M]
R3052	D0GB101JA002	100 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R3101	ERJ3RED620V	62 3W	[M]
R3102	ERJ3RED150V	15 3W	[M]
R3106	ERJ3RED620V	62 3W	[M]
R3107	ERJ3RED150V	15 3W	[M]
R3111	ERJ3RED560V	56 3W	[M]
R3112	ERJ3RED160V	16 3W	[M]
R3113	ERJ3GEYJ330V	33 1/16W	[M]
R3114	ERJ3GEYJ102V	1K 1/16W	[M]
R3116	ERJ3RED560V	56 3W	[M]
R3117	ERJ3GEYJ330V	33 1/16W	[M]
R3118	ERJ3GEYJ102V	1K 1/16W	[M]
R3121	ERJ3RED560V	56 3W	[M]
R3122	ERJ3GEYJ330V	33 1/16W	[M]
R3123	ERJ3GEYJ102V	1K 1/16W	[M]
R3235	ERJ3GEYJ561V	560 1/16W	[M]
R3236	ERJ3GEYJ103V	10K 1/16W	[M]
R3237	D0GB101JA002	100 1/16W	[M]
R3238	ERJ3GEYJ102V	1K 1/16W	[M]
R3239	ERJ3GEYJ561V	560 1/16W	[M]
R3240	ERJ3GEYJ103V	10K 1/16W	[M]
R3241	D0GB101JA002	100 1/16W	[M]
R3242	ERJ3GEYJ102V	1K 1/16W	[M]
R3243	ERJ3GEYJ561V	560 1/16W	[M]
R3244	ERJ3GEYJ103V	10K 1/16W	[M]
R3245	D0GB101JA002	100 1/16W	[M]
R3246	ERJ3GEYJ102V	1K 1/16W	[M]
R4213	ERJ3GEYJ470V	47 1/16W	[M]
R5101	ERJ3GEYJ472V	4.7K 1/16W	[M]
R5111	D0GB2R2JA002	2.2 1/16W	[M]
R5112	ERJ12YJ270H	27 1/2W	[M]
R5113	ERJ3GEYJ473V	47K 1/16W	[M]
R5114	ERJ3GEYJ223V	22K 1/16W	[M]
R5115	D0GB2R2JA002	2.2 1/16W	[M]
R5116	ERJ12YJ270H	27 1/2W	[M]
R5117	ERJ3GEYJ473V	47K 1/16W	[M]
R5121	D0GB560JA002	56 1/16W	[M]
R5122	D0GB560JA002	56 1/16W	[M]
R5123	D0GB560JA002	56 1/16W	[M]
R5124	D0GB560JA002	56 1/16W	[M]
R5125	D0GB560JA002	56 1/16W	[M]
R5126	ERJ3GEYJ102V	1K 1/16W	[M]
R5127	D0GB560JA002	56 1/16W	[M]
R5201	ERJ3GEY0R00V	0 1/16W	[M]
R5203	ERJ3GEY0R00V	0 1/16W	[M]
R5221	ERJ3GEY0R00V	0 1/16W	[M]
R5231	ERJ3GEYJ822V	8.2K 1/16W	[M]
R5232	ERJ3GEYJ822V	8.2K 1/16W	[M]
R5257	ERJ3GEY0R00V	0 1/16W	[M]
R5262	ERJ3GEY0R00V	0 1/16W	[M]
R5281	D0GB105JA002	1M 1/16W	[M]
R5294	ERJ3GEYJ123V	12K 1/16W	[M]
R5295	ERJ3GEYJ243V	24K 1/16W	[M]
R5320	ERJ3GEY0R00V	0 1/16W	[M]
R6201	ERJ3GEYJ473V	47K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R6202	ERJ3GEYJ103V	10K 1/16W	[M]
R6206	ERJ3GEYJ103V	10K 1/16W	[M]
R6207	ERJ3GEYJ472V	4.7K 1/16W	[M]
R6208	ERJ3GEYJ472V	4.7K 1/16W	[M]
R6210	D0GB101JA002	100 1/16W	[M]
R6211	ERJ3GEYJ472V	4.7K 1/16W	[M]
R6215	ERJ3GEYJ103V	10K 1/16W	[M]
R6216	ERJ3GEYJ102V	1K 1/16W	[M]
R6251	ERJ3RBD101V	100 3W	[M]
R6252	ERJ3RBD101V	100 3W	[M]
R6253	ERJ3RBD102V	1K 3W	[M]
R6562	ERJ3RBD331V	330 3W	[M]
R6563	ERJ3GEYJ103V	10K 1/16W	[M]
R6565	ERJ3GEYJ470V	47 1/16W	[M]
R6566	D0GB100JA002	10 1/16W	[M]
K2003	ERJ3GEY0R00V	0 1/16W	[M]
K2501	ERJ3GEY0R00V	0 1/16W	[M]
K2502	ERJ3GEY0R00V	0 1/16W	[M]
K3002	ERJ3GEY0R00V	0 1/16W	[M]
K3003	ERJ3GEY0R00V	0 1/16W	[M]
K3101	ERJ3GEY0R00V	0 1/16W	[M]
K3106	ERJ3GEY0R00V	0 1/16W	[M]
K4202	ERJ3GEY0R00V	0 1/16W	[M]
K4203	ERJ3GEY0R00V	0 1/16W	[M]
K4204	ERJ3GEY0R00V	0 1/16W	[M]
K4205	ERJ3GEY0R00V	0 1/16W	[M]
K6301	ERJ3GEY0R00V	0 1/16W	[M]
K6303	ERJ3GEY0R00V	0 1/16W	[M]
JA1	ERJ3GEY0R00V	0 1/16W	[M]
JA2	ERJ3GEY0R00V	0 1/16W	[M]
JA3	ERJ3GEY0R00V	0 1/16W	[M]
JA4	ERJ3GEY0R00V	0 1/16W	[M]
JA5	ERJ3GEY0R00V	0 1/16W	[M]
JA6	ERJ3GEY0R00V	0 1/16W	[M]
JA7	ERJ3GEY0R00V	0 1/16W	[M]
JA9	ERJ3GEY0R00V	0 1/16W	[M]
JA10	ERJ3GEY0R00V	0 1/16W	[M]
JA11	ERJ3GEY0R00V	0 1/16W	[M]
JA13	ERJ3GEY0R00V	0 1/16W	[M]
JA42	ERJ3GEY0R00V	0 1/16W	[M]
JA43	ERJ3GEY0R00V	0 1/16W	[M]
JA44	ERJ3GEY0R00V	0 1/16W	[M]
JA45	ERJ3GEY0R00V	0 1/16W	[M]
JA46	ERJ3GEY0R00V	0 1/16W	[M]
JA51	ERJ3GEY0R00V	0 1/16W	[M]
JA94	ERJ3GEY0R00V	0 1/16W	[M]
JB1	ERJ6GEY0R00V	0 1/10W	[M]
JB2	ERJ6GEY0R00V	0 1/10W	[M]
JB3	ERJ6GEY0R00V	0 1/10W	[M]
JB11	ERJ6GEY0R00V	0 1/10W	[M]
JB12	ERJ6GEY0R00V	0 1/10W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
JB13	ERJ6GEY0R00V	0 1/10W	[M]
JB14	ERJ6GEY0R00V	0 1/10W	[M]
JB15	ERJ6GEY0R00V	0 1/10W	[M]
JB16	ERJ6GEY0R00V	0 1/10W	[M]
JB17	ERJ6GEY0R00V	0 1/10W	[M]
JB18	ERJ6GEY0R00V	0 1/10W	[M]
JB19	ERJ6GEY0R00V	0 1/10W	[M]
JB20	ERJ6GEY0R00V	0 1/10W	[M]
JB21	ERJ6GEY0R00V	0 1/10W	[M]
JB23	ERJ6GEY0R00V	0 1/10W	[M]
JB24	ERJ6GEY0R00V	0 1/10W	[M]
JB25	ERJ6GEY0R00V	0 1/10W	[M]
JB30	ERJ6GEY0R00V	0 1/10W	[M]
JB31	ERJ6GEY0R00V	0 1/10W	[M]
JB32	ERJ6GEY0R00V	0 1/10W	[M]
JB33	ERJ6GEY0R00V	0 1/10W	[M]
JB34	ERJ6GEY0R00V	0 1/10W	[M]
JB41	ERJ6GEY0R00V	0 1/10W	[M]
JB42	ERJ6GEY0R00V	0 1/10W	[M]
JB43	ERJ6GEY0R00V	0 1/10W	[M]
JB51	ERJ6GEY0R00V	0 1/10W	[M]
JB52	ERJ6GEY0R00V	0 1/10W	[M]
JB53	ERJ6GEY0R00V	0 1/10W	[M]
RA2021	EXBV4V102JV	1K 1/16W	[M]
RA2022	EXBV4V472JV	4.7K 1/16W	[M]
RA2501	EXBV4V103JV	10K 1/16W	[M]
RA2521	EXBV8V473JV	47K 1/16W	[M]
RA3001	EXBV4V102JV	1K 1/16W	[M]
RA3002	EXBV8V820JV	82 1/16W	[M]
RA3003	EXBV8V820JV	82 1/16W	[M]
RA3004	EXBV8V820JV	82 1/16W	[M]
RA3005	EXBV8V820JV	82 1/16W	[M]
RA3006	EXBV8V820JV	82 1/16W	[M]
RA3007	EXBV8V820JV	82 1/16W	[M]
RA3008	EXBV8V820JV	82 1/16W	[M]
RA3009	EXBV8V820JV	82 1/16W	[M]
RA3010	EXBV8V820JV	82 1/16W	[M]
RA3011	EXBV8V820JV	82 1/16W	[M]
RA3012	EXBV8V820JV	82 1/16W	[M]
RA3013	EXBV4V220JV	22 1/16W	[M]
RA3051	EXBV4V101JV	100 1/16W	[M]
RA3053	EXBV4V101JV	100 1/16W	[M]
RA5121	EXBV8V560JV	56 1/16W	[M]
RA5122	EXBV4V560JV	56 1/16W	[M]
RA5123	EXBV4V560JV	56 1/16W	[M]
RA5201	EXBV8V101JV	100 1/16W	[M]
RA6201	EXBV4V103JV	10K 1/16W	[M]
RA6202	EXBV4V103JV	10K 1/16W	[M]
RA6203	EXBV4V472JV	4.7K 1/16W	[M]
RA6204	EXBV4V103JV	10K 1/16W	[M]
RA6205	EXBV8V103JV	10K 1/16W	[M]
RA6206	EXBV4V473JV	47K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
		CAPACITORS	
C11	ECQE1104KF3	0.1 100V	[M]
C12	ECA1EM472B	4700 25V	[M]
C13	ECA1HAK4R7XB	4.7 50V	[M]
C14	ECBT1H103KB5	0.01 50V	[M]
C15	ECA1CAK100XB	10 16V	[M]
C16	ECBT1H103KB5	0.01 50V	[M]
C17	F1D1H1040002	0.1 50V	[M]
C18	ECA1EM101B	100 25V	[M]
C19	F1H1A105A038	1 10V	[M]
C20	EEUFC0J821B	820P 6.3V	[M]
C21	ECA1CAK100XB	10 16V	[M]
C22	F1H1A105A038	1 10V	[M]
C23	F1H1A105A038	1 10V	[M]
C24	EEUFC0J821B	820P 6.3V	[M]
C25	ECBT1H103KB5	0.01 50V	[M]
C26	ECA1CAK101XB	100 16V	[M]
C27	EEUFC0J821B	820P 6.3V	[M]
C28	ECEA1AKA101B	100 10V	[M]
C29	ECA1CAK100XB	10 16V	[M]
C30	ECBT1H102KB5	1000P 50V	[M]
C31	ECA1CAK100XB	10 16V	[M]
C32	ECBT1H102KB5	1000P 50V	[M]
C33	ECA1AM102B	1000 10V	[M]
C34	ECA1EM101B	100 25V	[M]
C42	ECA1EM222B	2200 25V	[M]
C44	ECBT1C103NS5	0.01 16V	[M]
C48	ECA1EAK100XB	10 25V	[M]
C49	F1D1H1040002	0.1 50V	[M]
C50	ECA1CAK100XB	10 16V	[M]
C51	ECBT1H102KB5	1000P 50V	[M]
C52	F2A1H101A153	100P 50V	[M]
C53	ECA1EAK100XB	10 25V	[M]
C54	ECA1EAK220XB	22 25V	[M]
C55	ECBT1H102KB5	1000P 50V	[M]
C56	ECA1HM470B	47 50V	[M]
C57	ECA1CAK100XB	10 16V	[M]
C58	ECA1CAK100XB	10 16V	[M]
C61	ECJ3YB1E105K	1 25V	[M]
C62	ECJ3YB1E105K	1 25V	[M]
C71	F1D1H473A012	0.047 50V	[M]
C72	ECEA1VKA100B	10 35V	[M]
C73	F1D1H473A012	0.047 50V	[M]
C74	ECA1JM101B	100 63V	[M]
C75	F2A1H101A153	100P 50V	[M]
C80	ECA1EM102B	1000 25V	[M]
C82	ECA1JM101B	100 63V	[M]
C83	F2A1H101A153	100P 50V	[M]
C84	ECA1EM102B	1000 25V	[M]
C151	ECA1CAK100XB	10 16V	[M]
C152	ECJ1VB1H331K	330P 50V	[M]
C153	ECJ1VB1H102K	1000P 50V	[M]
C154	F2A0J470A245	47P 6.3V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C155	ECJ1VB1H561K	560P 50V	[M]
C156	ECJ1VC1H470J	47P 50V	[M]
C157	ECJ1VC1H470J	47P 50V	[M]
C158	ECJ1VB1H103K	0.01 50V	[M]
C159	ECJ1VB1H102K	1000P 50V	[M]
C160	F2A0J470A245	47P 6.3V	[M]
C401	ECA1CAK100XB	10 16V	[M]
C402	ECA1CAK100XB	10 16V	[M]
C405	ECJ1VB1H471K	470P 50V	[M]
C406	ECJ1VB1H471K	470P 50V	[M]
C413	ECA1CAK100XB	10 16V	[M]
C414	ECA1CAK100XB	10 16V	[M]
C417	ECA1CAK100XB	10 16V	[M]
C421	ECA1CAK100XB	10 16V	[M]
C423	ECJ1VB1H102K	1000P 50V	[M]
C425	ECJ2VB1C104K	0.1 16V	[M]
C426	ECJ2VB1C104K	0.1 16V	[M]
C427	ECJ2VB1C104K	0.1 16V	[M]
C431	ECA1CAK100XB	10 16V	[M]
C432	ECA1CAK100XB	10 16V	[M]
C435	ECJ1VB1H471K	470P 50V	[M]
C436	ECJ1VB1H471K	470P 50V	[M]
C437	ECJ1VC1H470J	47P 50V	[M]
C438	ECJ1VC1H470J	47P 50V	[M]
C444	ECJ2VB1C104K	0.1 16V	[M]
C445	ECJ1VB1H102K	1000P 50V	[M]
C446	ECJ1VB1H102K	1000P 50V	[M]
C447	ECJ1VB1H102K	1000P 50V	[M]
C449	ECJ2VB1C104K	0.1 16V	[M]
C461	ECJ2VB1C104K	0.1 16V	[M]
C462	ECJ2VB1C104K	0.1 16V	[M]
C463	ECJ1VC1H470J	47P 50V	[M]
C464	ECJ1VC1H470J	47P 50V	[M]
C465	ECJ1VC1H470J	47P 50V	[M]
C491	ECJ1VC1H101J	100P 50V	[M]
C492	ECJ1VC1H101J	100P 50V	[M]
C493	ECJ1VC1H101J	100P 50V	[M]
C494	ECJ1VC1H101J	100P 50V	[M]
C495	ECJ1VB1H103K	0.01 50V	[M]
C496	ECJ1VB1H103K	0.01 50V	[M]
C501	ECA1HAK010XB	1 50V	[M]
C502	ECA1HAK010XB	1 50V	[M]
C503	ECA1HAK010XB	1 50V	[M]
C504	ECA1HAK010XB	1 50V	[M]
C505	ECA1HAK010XB	1 50V	[M]
C506	ECA1HAK010XB	1 50V	[M]
C507	ECA1HAK010XB	1 50V	[M]
C508	ECA1HAK010XB	1 50V	[M]
C511	ECEA1HKA4R7B	4.7 50V	[M]
C512	ECUVNA105KBV	1 10V	[M]
C513	ECEA1HKA4R7B	4.7 50V	[M]
C514	ECEA0JKA101B	100 6.3V	[M]
C515	ECUVNA105KBV	1 10V	[M]
C516	ECJ1VB1H103K	0.01 50V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C517	F1H1H5R0A759	5P 50V	[M]
C518	ECJ1VC1H120J	12P 50V	[M]
C519	ECUVNA105KBV	1 10V	[M]
C520	ECUVNA105KBV	1 10V	[M]
C521	ECJ1VB1H222K	2200P 50V	[M]
C522	ECJ1VB1H222K	2200P 50V	[M]
C523	EEAFC0J101B	100P 6.3V	[M]
C524	ECJ1VB1H103K	0.01 50V	[M]
C525	ECUVNA105KBV	1 10V	[M]
C526	ECUVNA105KBV	1 10V	[M]
C527	ECJ1VB1H103K	0.01 50V	[M]
C528	F2A0J470A245	47P 6.3V	[M]
C529	EEAFC0J101B	100P 6.3V	[M]
C530	F2A0J470A245	47P 6.3V	[M]
C531	ECEA0JKA101B	100 6.3V	[M]
C532	ECUVNA105KBV	1 10V	[M]
C533	ECUVNA105KBV	1 10V	[M]
C535	ECJ1VB1H222K	2200P 50V	[M]
C536	ECJ1VB1H222K	2200P 50V	[M]
C537	ECUVNA105KBV	1 10V	[M]
C538	ECUVNA105KBV	1 10V	[M]
C539	ECUVNA105KBV	1 10V	[M]
C540	ECUVNA105KBV	1 10V	[M]
C542	ECUVNA105KBV	1 10V	[M]
C543	ECJ1VB1H103K	0.01 50V	[M]
C544	ECUVNA105KBV	1 10V	[M]
C545	ECUVNA105KBV	1 10V	[M]
C546	ECEA1AKA221B	220 10V	[M]
C547	ECJ1VB1E223K	0.022 25V	[M]
C548	ECJ1VB1H103K	0.01 50V	[M]
C549	ECJ1VB1H471K	470P 50V	[M]
C551	ECUVNA105KBV	1 10V	[M]
C552	ECUVNA105KBV	1 10V	[M]
C555	ECJ1VC1H101J	100P 50V	[M]
C556	ECJ1VC1H101J	100P 50V	[M]
C557	TCSCS1A106KA	10 10V	[M]
C558	TCSCS1A106KA	10 10V	[M]
C559	F1H1A154A028	0.15 10V	[M]
C560	F1H1A154A028	0.15 10V	[M]
C561	F1H1A474A025	0.47 10V	[M]
C562	F1H1A474A025	0.47 10V	[M]
C565	ECUVNA105KBV	1 10V	[M]
C566	TCSCS1A106KA	10 10V	[M]
C571	ECJ1VB1H221K	220P 50V	[M]
C572	ECJ1VB1H221K	220P 50V	[M]
C573	TCSCS1A106KA	10 10V	[M]
C574	TCSCS1A106KA	10 10V	[M]
C575	ECJ1VB1A224K	0.22 10V	[M]
C576	TCSCS1A106KA	10 10V	[M]
C577	ECJ1VB1H103K	0.01 50V	[M]
C578	ECJ1VC1H470J	47P 50V	[M]
C579	ECJ1VC1H470J	47P 50V	[M]
C591	ECJ2VB1C104K	0.1 16V	[M]
C593	ECJ1VB1H103K	0.01 50V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C594	ECJ2VB1C104K	0.1 16V	[M]
C595	ECA1CAK220XB	22 16V	[M]
C596	ECJ2VB1C104K	0.1 16V	[M]
C601	ECA1HAK2R2XB	2.2 50V	[M]
C602	ECA1HAK2R2XB	2.2 50V	[M]
C605	ECEA1HKA4R7B	4.7 50V	[M]
C606	ECEA1HKA4R7B	4.7 50V	[M]
C607	ECJ1VC1H101J	100P 50V	[M]
C608	ECJ1VC1H101J	100P 50V	[M]
C609	ECJ1VC1H220J	22P 50V	[M]
C610	ECJ1VC1H220J	22P 50V	[M]
C615	ECA1CAK100XB	10 16V	[M]
C616	ECA1CAK100XB	10 16V	[M]
C617	F2A0J101A245	100P 6.3V	[M]
C625	ECA1CAK100XB	10 16V	[M]
C626	ECA1HAK3R3XB	3.3 50V	[M]
C627	ECA1CAK100XB	10 16V	[M]
C628	ECA1CAK100XB	10 16V	[M]
C631	ECJ1VB1H102K	1000P 50V	[M]
C632	ECJ1VB1H102K	1000P 50V	[M]
C635	ECJ1VB1H103K	0.01 50V	[M]
C636	ECJ1VB1H103K	0.01 50V	[M]
C639	ECA1CAK100XB	10 16V	[M]
C640	ECA1CAK100XB	10 16V	[M]
C641	ECUV1C333KBV	0.033 16V	[M]
C642	ECUV1C333KBV	0.033 16V	[M]
C643	ECUVNC104KBV	0.1 16V	[M]
C644	ECUVNC104KBV	0.1 16V	[M]
C645	ECJ1VC1H101J	100P 50V	[M]
C646	ECJ1VC1H101J	100P 50V	[M]
C647	ECA1HAK010XB	1 50V	[M]
C648	ECA1HAK010XB	1 50V	[M]
C655	ECA1HAK010XB	1 50V	[M]
C656	ECA1HAK010XB	1 50V	[M]
C661	ECJ1VB1H471K	470P 50V	[M]
C662	ECA1CAK220XB	22 16V	[M]
C663	ECUVNC473KBV	0.047 16V	[M]
C664	ECJ1VB1H562K	5600P 50V	[M]
C665	F1H1A154A028	0.15 10V	[M]
C666	ECJ1VB1C393K	0.039 16V	[M]
C667	ECUV1C104KBV	0.1 16V	[M]
C668	ECEA1AKA330B	33 10V	[M]
C669	ECJ1VB1H103K	0.01 50V	[M]
C670	ECJ1VB1H103K	0.01 50V	[M]
C673	ECJ1VC1H330J	33P 50V	[M]
C674	ECJ1VC1H330J	33P 50V	[M]
C675	ECJ1VC1H101J	100P 50V	[M]
C676	ECJ1VC1H101J	100P 50V	[M]
C677	ECA1HAK010XB	1 50V	[M]
C678	ECA1HAK010XB	1 50V	[M]
C679	ECA1CAK100XB	10 16V	[M]
C680	ECA1CAK100XB	10 16V	[M]
C683	ECJ1VC1H101J	100P 50V	[M]
C684	ECJ1VC1H101J	100P 50V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C685	ECJ1VC1H470J	47P 50V	[M]
C686	ECJ1VB1H102K	1000P 50V	[M]
C687	ECA1HAK010XB	1 50V	[M]
C688	ECA1CAK100XB	10 16V	[M]
C689	ECA1CAK100XB	10 16V	[M]
C690	ECA1CAK220XB	22 16V	[M]
C691	ECA1CAK100XB	10 16V	[M]
C693	ECJ1VB1H103K	0.01 50V	[M]
C694	ECJ1VB1H103K	0.01 50V	[M]
C700	ECUVNA105KBV	1 10V	[M]
C701	ECA1CAK100XB	10 16V	[M]
C702	ECA1CAK100XB	10 16V	[M]
C711	ECEA1HKA4R7B	4.7 50V	[M]
C712	ECUVNA105KBV	1 10V	[M]
C728	ECEA1HKA4R7B	4.7 50V	[M]
C732	ECJ1VB1H103K	0.01 50V	[M]
C733	ECA1CAK100XB	10 16V	[M]
C734	ECJ1VB1H103K	0.01 50V	[M]
C802	ECA1HAK010XB	1 50V	[M]
C803	ECA1HAK3R3XB	3.3 50V	[M]
C810	F1H1C473A088	0.047 16V	[M]
C811	ECEA0JKA101B	100 6.3V	[M]
C812	ECJ1VB1H102K	1000P 50V	[M]
C813	ECJ1VB1H103K	0.01 50V	[M]
C815	ECA0JAM102XB	1000 6.3V	[M]
C850	ECJ1VB1H103K	0.01 50V	[M]
C860	ECJ1VB1H102K	1000P 50V	[M]
C890	ECJ1VB1H561K	560P 50V	[M]
C891	ECJ1VB1H103K	0.01 50V	[M]
C892	ECA1CAK220XB	22 16V	[M]
C899	ECJ2VB1C104K	0.1 16V	[M]
C901	EEAFC0J101B	100P 6.3V	[M]
C902	ECJ1VB1H103K	0.01 50V	[M]
C903	ECJ1VC1H121J	120P 50V	[M]
C904	ECJ1VB1H103K	0.01 50V	[M]
C905	F3F1A475A001	47 10V	[M]
C906	ECJ1VB1H103K	0.01 50V	[M]
C907	ECEA1EKS220B	22 25V	[M]
C908	ECEA1EKS220B	22 25V	[M]
C909	ECEA1EKS220B	22 25V	[M]
C910	ECEA1EKS220B	22 25V	[M]
C911	ECJ2VB1C104K	0.1 16V	[M]
C912	ECJ1VC1H560J	56P 50V	[M]
C913	ECJ1VC1H560J	56P 50V	[M]
C914	ECJ1VC1H560J	56P 50V	[M]
C951	ECJ1VC1H101K	100P 50V	[M]
C952	ECJ1VC1H101K	100P 50V	[M]
C953	ECJ2VB1C104K	0.1 16V	[M]
C961	ECJ1VB1H103K	0.01 50V	[M]
C991	ECJ1VB1H123K	0.012 50V	[M]
C992	ECJ1VB1H123K	0.012 50V	[M]
C1001	F2A0J101A245	100P 6.3V	[M]
C1002	ECJ1VB1H103K	0.01 50V	[M]
C1004	ECA0JAM102XB	1000 6.3V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C1005	ECJ1VB1H103K	0.01 50V	[M]
C1006	F2A0J101A245	100P 6.3V	[M]
C1007	ECA1HAK010XB	1 50V	[M]
C1009	ECJ1VB1H103K	0.01 50V	[M]
C1010	ECA0JAM102XB	1000 6.3V	[M]
C1011	F2A0J470A245	47P 6.3V	[M]
C1012	F2A0J101A245	100P 6.3V	[M]
C1014	ECA0JAK331XB	330 6.3V	[M]
C1015	ECJ1VB1H103K	0.01 50V	[M]
C1016	ECA1CAK220XB	22 16V	[M]
C1017	ECA1HAK010XB	1 50V	[M]
C1018	ECA0JAK331XB	330 6.3V	[M]
C1019	ECA1HAK010XB	1 50V	[M]
C1021	ECA1CAK100XB	10 16V	[M]
C1023	F1H1H104A783	0.1 50V	[M]
C1031	ECA1HAK010XB	1 50V	[M]
C1032	ECA1HAK010XB	1 50V	[M]
C1049	ECJ1VF1C104Z	0.1 16V	[M]
C1050	ECJ1VF1C104Z	0.1 16V	[M]
C1064	ECUVNA105KBV	1 10V	[M]
C1065	ECUVNA105KBV	1 10V	[M]
C1072	ECJ1VB1H103K	0.01 50V	[M]
C1091	ECJ1VB1H103K	0.01 50V	[M]
C1092	F2A0J101A245	100P 6.3V	[M]
C1097	ECJ1VB1H103K	0.01 50V	[M]
C1098	ECJ1VB1H103K	0.01 50V	[M]
C2001	EEE0JA101SP	100P 6.3V	[M]
C2002	EEE0JA101SP	100P 6.3V	[M]
C2003	ECUVNC104ZFV	0.1 16V	[M]
C2004	ECUVNC104ZFV	0.1 16V	[M]
C2005	ECUVNC104ZFV	0.1 16V	[M]
C2006	ECUVNC104ZFV	0.1 16V	[M]
C2007	ECUVNC104ZFV	0.1 16V	[M]
C2008	ECUVNC104ZFV	0.1 16V	[M]
C2009	ECUVNC104ZFV	0.1 16V	[M]
C2010	ECUVNC104ZFV	0.1 16V	[M]
C2011	ECUVNC104ZFV	0.1 16V	[M]
C2012	ECUVNC104ZFV	0.1 16V	[M]
C2013	ECUVNC104ZFV	0.1 16V	[M]
C2014	ECUVNC104ZFV	0.1 16V	[M]
C2015	ECUVNC104ZFV	0.1 16V	[M]
C2016	ECUVNC104ZFV	0.1 16V	[M]
C2017	ECUVNC104ZFV	0.1 16V	[M]
C2018	ECUVNC104ZFV	0.1 16V	[M]
C2021	EEE0JA101SP	100P 6.3V	[M]
C2022	ECUVNC104ZFV	0.1 16V	[M]
C2023	ECUVNC104ZFV	0.1 16V	[M]
C2024	ECUVNC104ZFV	0.1 16V	[M]
C2025	ECUVNC104ZFV	0.1 16V	[M]
C2031	ECUV1C104KBV	0.1 16V	[M]
C2032	ECUV1C104KBV	0.1 16V	[M]
C2034	F1H1C393A075	0.039 16V	[M]
C2035	ECJ1VB1H822K	8200P 50V	[M]
C2036	ECUV1C104KBV	0.1 16V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C2038	ECUV1C104KBV	0.1 16V	[M]
C2039	ECJ1VB1H103K	0.01 50V	[M]
C2040	ECJ1VC1H102J	1000P 50V	[M]
C2041	F1H1H331A765	330P 50V	[M]
C2042	F1H1H331A765	330P 50V	[M]
C2043	ECUV1H101JCV	100P 50V	[M]
C2044	F1H1H391A765	390P 50V	[M]
C2045	ECJ1VC1H102J	1000P 50V	[M]
C2046	ECJ1VC1H102J	1000P 50V	[M]
C2047	ECJ1VB1H103K	0.01 50V	[M]
C2048	ECUV1C153KBV	0.015 16V	[M]
C2050	ECUV1C333KBV	0.033 16V	[M]
C2051	ECUV1H680JCV	68P 50V	[M]
C2052	ECUVNC104ZFV	0.1 16V	[M]
C2053	ECUVNC104ZFV	0.1 16V	[M]
C2054	F1H1H681A765	680P 50V	[M]
C2055	ECJ1VB1H682K	6800P 50V	[M]
C2056	ECJ1VB1H272K	2700P 50V	[M]
C2057	ECJ1VB1H272K	2700P 50V	[M]
C2058	ECJ1VC1H102J	1000P 50V	[M]
C2059	ECUV1H821JCV	820P 50V	[M]
C2060	ECJ1VC1H102J	1000P 50V	[M]
C2061	F1H1H331A765	330P 50V	[M]
C2062	F1H1H331A765	330P 50V	[M]
C2063	ECJ1VC1H102J	1000P 50V	[M]
C2064	ECJ1VC1H102J	1000P 50V	[M]
C2065	ECJ1VC1H102J	1000P 50V	[M]
C2066	ECJ1VB1H472K	4700P 50V	[M]
C2067	ECJ1VB1H472K	4700P 50V	[M]
C2073	ECUVNC104ZFV	0.1 16V	[M]
C2101	ECUVNC104ZFV	0.1 16V	[M]
C2102	ECUVNC104ZFV	0.1 16V	[M]
C2501	ECEV1CA101WP	100 16V	[M]
C2502	ECUVNC104ZFV	0.1 16V	[M]
C2503	ECUVNC104ZFV	0.1 16V	[M]
C2504	ECUVNC104ZFV	0.1 16V	[M]
C2511	ECUVNH103KBV	0.01 50V	[M]
C2512	ECUVNH103KBV	0.01 50V	[M]
C2513	ECUVNH103KBV	0.01 50V	[M]
C2514	ECJ1VB1C104K	0.1 16V	[M]
C2521	EEVFC1C470P	47P 16V	[M]
C2522	ECEV1CA220WR	22 16V	[M]
C2523	EEVFC0J221P	220P 6.3V	[M]
C2524	ECUVNC104ZFV	0.1 16V	[M]
C2525	ECUVNC104ZFV	0.1 16V	[M]
C2526	ECUVNC104ZFV	0.1 16V	[M]
C2527	ECUVNC104ZFV	0.1 16V	[M]
C2528	ECUVNC104ZFV	0.1 16V	[M]
C2529	ECUVNC104ZFV	0.1 16V	[M]
C3001	F2G0J331A015	330P 6.3V	[M]
C3002	F2G0J331A015	330P 6.3V	[M]
C3003	ECUVNC104ZFV	0.1 16V	[M]
C3004	ECUVNC104ZFV	0.1 16V	[M]
C3005	ECUVNC104ZFV	0.1 16V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C3006	ECUVNC104ZFV	0.1 16V	[M]
C3007	ECUVNC104ZFV	0.1 16V	[M]
C3008	ECUVNC104ZFV	0.1 16V	[M]
C3009	ECUVNC104ZFV	0.1 16V	[M]
C3010	ECUVNC104ZFV	0.1 16V	[M]
C3011	ECUVNC104ZFV	0.1 16V	[M]
C3012	ECUVNC104ZFV	0.1 16V	[M]
C3013	ECUVNC104ZFV	0.1 16V	[M]
C3014	ECUVNC104ZFV	0.1 16V	[M]
C3015	ECUVNC104ZFV	0.1 16V	[M]
C3016	ECUVNC104ZFV	0.1 16V	[M]
C3017	ECUVNC104ZFV	0.1 16V	[M]
C3018	ECUVNC104ZFV	0.1 16V	[M]
C3019	F1H0J1050013	1 6.3V	[M]
C3020	ECUVNC104ZFV	0.1 16V	[M]
C3021	F1H0J1050013	1 6.3V	[M]
C3022	ECUVNC104ZFV	0.1 16V	[M]
C3023	ECUVNC104ZFV	0.1 16V	[M]
C3024	ECUVNC104ZFV	0.1 16V	[M]
C3025	ECUVNC104ZFV	0.1 16V	[M]
C3026	ECUVNC104ZFV	0.1 16V	[M]
C3027	ECUVNC104ZFV	0.1 16V	[M]
C3028	ECUVNC104ZFV	0.1 16V	[M]
C3029	ECUVNC104ZFV	0.1 16V	[M]
C3030	ECUVNC104ZFV	0.1 16V	[M]
C3031	ECUVNC104ZFV	0.1 16V	[M]
C3032	ECUVNC104ZFV	0.1 16V	[M]
C3033	ECUVNC104ZFV	0.1 16V	[M]
C3034	ECUVNC104ZFV	0.1 16V	[M]
C3035	ECUVNC104ZFV	0.1 16V	[M]
C3036	ECUVNC104ZFV	0.1 16V	[M]
C3037	F2G0J331A015	330P 6.3V	[M]
C3038	ECUVNC104ZFV	0.1 16V	[M]
C3039	ECUVNC104ZFV	0.1 16V	[M]
C3051	ECJ1VC1H220J	22P 50V	[M]
C3061	ECUVNC104ZFV	0.1 16V	[M]
C3062	ECUVNC104ZFV	0.1 16V	[M]
C3063	ECUVNC104ZFV	0.1 16V	[M]
C3064	ECUVNC104ZFV	0.1 16V	[M]
C3065	ECUVNC104ZFV	0.1 16V	[M]
C3066	ECUVNC104ZFV	0.1 16V	[M]
C3067	ECUVNC104ZFV	0.1 16V	[M]
C3068	ECUVNC104ZFV	0.1 16V	[M]
C3069	ECUVNC104ZFV	0.1 16V	[M]
C3070	ECUVNC104ZFV	0.1 16V	[M]
C3071	ECUVNC104ZFV	0.1 16V	[M]
C3072	ECUVNC104ZFV	0.1 16V	[M]
C3073	ECUVNC104ZFV	0.1 16V	[M]
C3074	ECUVNC104ZFV	0.1 16V	[M]
C3110	EEE0JA101SP	100P 6.3V	[M]
C3111	ECUVNC104ZFV	0.1 16V	[M]
C3116	ECUVNC104ZFV	0.1 16V	[M]
C3121	ECUVNC104ZFV	0.1 16V	[M]
C3213	ECUV1H120JCV	12P 50V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C3214	ECUV1H120JCV	12P 50V	[M]
C3215	ECJ1VB1H103K	0.01 50V	[M]
C3217	ECUV1H120JCV	12P 50V	[M]
C3218	ECUV1H120JCV	12P 50V	[M]
C3219	ECJ1VB1H103K	0.01 50V	[M]
C3222	ECJ1VC1H150J	15P 50V	[M]
C3223	ECJ1VC1H150J	15P 50V	[M]
C3224	ECJ1VB1H103K	0.01 50V	[M]
C4207	ECUVNC104ZFV	0.1 16V	[M]
C4208	ECUVNC104ZFV	0.1 16V	[M]
C4209	ECUVNC104ZFV	0.1 16V	[M]
C4210	ECUVNC104ZFV	0.1 16V	[M]
C4211	F3F1A106A001	10 10V	[M]
C4213	TCSCS1D105KA	1 20V	[M]
C4215	ECUVNC104ZFV	0.1 16V	[M]
C4216	F2G0J101A015	100P 6.3V	[M]
C4217	ECUVNC104ZFV	0.1 16V	[M]
C4219	F3F1A106A001	10 10V	[M]
C4220	F3F1A106A001	10 10V	[M]
C4222	F2G0J331A015	330P 6.3V	[M]
C4223	F2G0J331A015	330P 6.3V	[M]
C4234	ECUVNC104ZFV	0.1 16V	[M]
C4235	ECUVNC104ZFV	0.1 16V	[M]
C4236	ECUVNC104ZFV	0.1 16V	[M]
C4237	ECUVNC104ZFV	0.1 16V	[M]
C5101	ECUVNC104ZFV	0.1 16V	[M]
C5102	ECUVNC104ZFV	0.1 16V	[M]
C5103	F3F1A106A001	10 10V	[M]
C5110	ECEV0JA470WR	47 6.3V	[M]
C5111	ECEV0JA470WR	47 6.3V	[M]
C5115	ECEV0JA470WR	47 6.3V	[M]
C5201	EEE1CA100SR	10P 16V	[M]
C5202	EEE1CA100SR	10P 16V	[M]
C5203	ECUVNC104ZFV	0.1 16V	[M]
C5204	ECUVNC104ZFV	0.1 16V	[M]
C5205	ECUVNC104ZFV	0.1 16V	[M]
C5221	ECUVNC104ZFV	0.1 16V	[M]
C5232	ECUVNC104ZFV	0.1 16V	[M]
C5233	ECUVNC104ZFV	0.1 16V	[M]
C5234	ECUVNC104ZFV	0.1 16V	[M]
C5235	ECUV1C104KBV	0.1 16V	[M]
C5236	ECUV1C104KBV	0.1 16V	[M]
C5254	ECJ1VB1H391K	390P 50V	[M]
C5256	ECJ1VB1H222K	2200P 50V	[M]
C5262	ECUV1H181JCV	180P 50V	[M]
C5264	F1H1C183A075	0.018 16V	[M]
C5271	ECJ1VB1H102K	1000P 50V	[M]
C5272	ECJ1VB1A224K	0.22 10V	[M]
C5273	ECJ1VB1H182K	1800P 50V	[M]
C5274	ECUV1C104KBV	0.1 16V	[M]
C5282	ECJ1VB1H103K	0.01 50V	[M]
C5283	F1H1H561A765	560P 50V	[M]
C5290	ECJ1VB1H102K	1000P 50V	[M]
C5291	ECJ1VB1H272K	2700P 50V	[M]

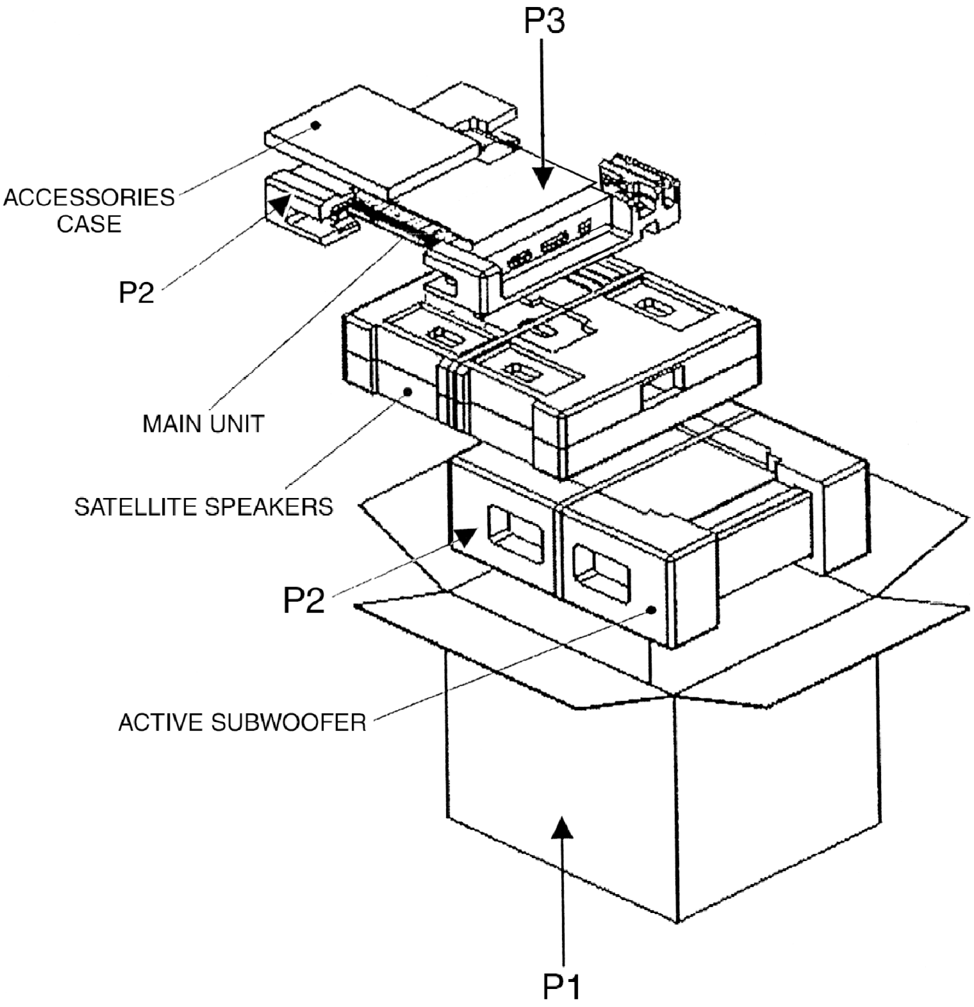
Ref. No.	Part No.	Part Name & Description	Remarks
C5292	ECUV1H101JCV	100P 50V	[M]
C5299	F1H1H331A765	330P 50V	[M]
C6201	EEE0JA330WR	33P 6.3V	[M]
C6202	ECUVNC104ZFV	0.1 16V	[M]
C6203	ECUVNC104ZFV	0.1 16V	[M]
C6204	ECUVNC104ZFV	0.1 16V	[M]
C6205	ECUVNC104ZFV	0.1 16V	[M]
C6206	ECUVNC104ZFV	0.1 16V	[M]
C6211	ECUV1H101JCV	100P 50V	[M]
C6215	ECUV1C104KBV	0.1 16V	[M]
C6221	ECUVNC104ZFV	0.1 16V	[M]
C6222	ECUVNC104ZFV	0.1 16V	[M]
C6223	ECUVNC104ZFV	0.1 16V	[M]
C6251	F3F1A106A001	10 10V	[M]
C6252	F3F1A106A001	10 10V	[M]
C6253	F3F1A106A001	10 10V	[M]
C6254	ECUVNC104ZFV	0.1 16V	[M]
C6255	ECUVNC104ZFV	0.1 16V	[M]
C6256	ECUV1C104KBV	0.1 16V	[M]
C6257	EEE0JA101SP	100P 6.3V	[M]
C6301	ECUVNC104ZFV	0.1 16V	[M]
C6302	ECUVNC104ZFV	0.1 16V	[M]
C6561	EEE0GA470SR	47P 4V	[M]
C6563	EEE0GA470SR	47P 4V	[M]
C6564	ECUVNC104ZFV	0.1 16V	[M]
C6565	ECJ1VC1H150J	15P 50V	[M]
C6566	ECUVNC104ZFV	0.1 16V	[M]
C6567	ECJ1VC1H150J	15P 50V	[M]
C6568	ECUVNC104ZFV	0.1 16V	[M]

22.4. Packing Materials & Accessories Parts List

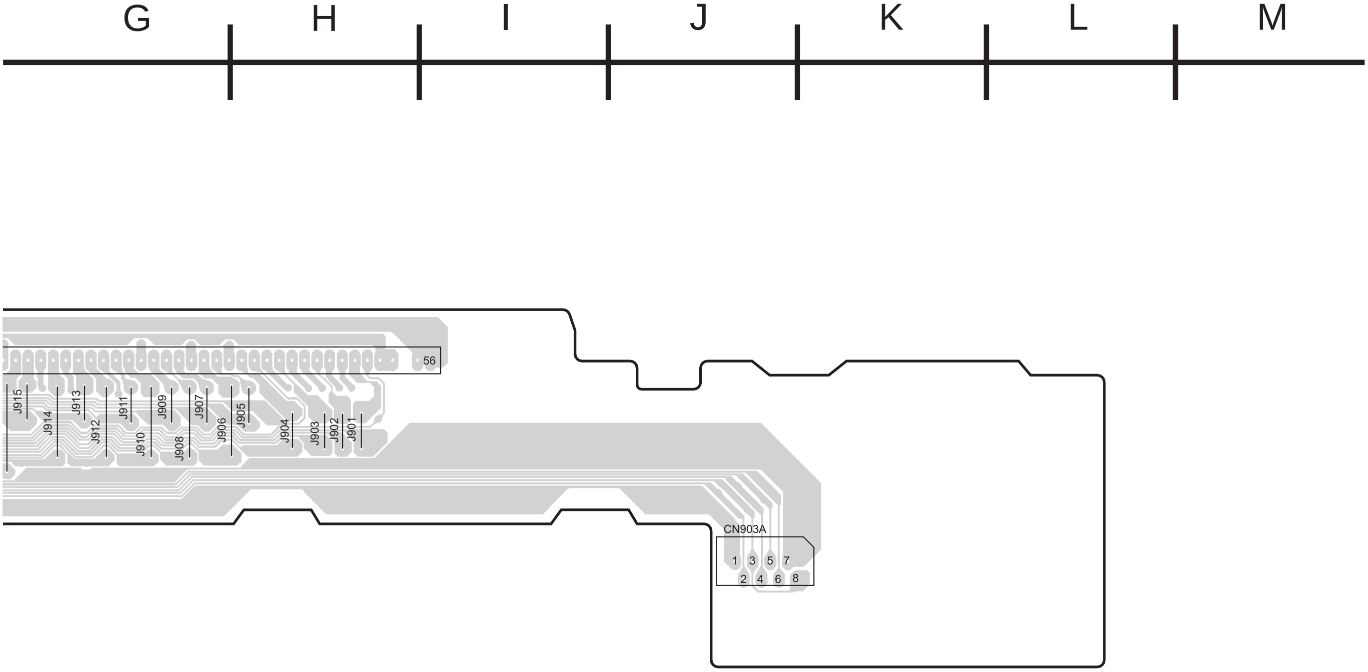
Ref. No.	Part No.	Part Name & Description	Remarks
		PACKING MATERIALS	
P1	RPGX1137A	PACKING CASE	[M]EG
P1	RPGX1137B	PACKING CASE	[M]E
P2	RPNX0194	POLYFOAM	[M]
P3	RPFX0058	MIRAMAT SHEET	[M]
		ACCESSORIES	
A1	EUR7623X40	REMOTE CONTROL	[M]
A1-1	UR76EC2303B	R/C BATTERY COVER	[M]
A2	RJA0019-2A	AC CORD	[M] ⚠
A3	RQT6753-1D	O/I BOOK (Ge/It/Fr)	[M]EG
A3	RQT6754-1H	O/I BOOK (Sw/Du/Da)	[M]EG
A3	RQT6755-1R	O/I BOOK (Sp/Po/Cz)	[M]E
A3	RQT7026-1B	O/I BOOK (En)	[M]E
A4	RSA0007-J	FM ANT	[M]
A5	RJL1P016B15A	VIDEO CABLE	[M]
A6	K1HA25HA0001	SYSTEM CABLE	[M]
A8	N1DAAAA00001	LINEAR ANTENNA	[M]
A9	QWBG002AA	CLAMPER	[M]
A10	XSN5+16FN	SCREW	[M]

22.5. Packaging

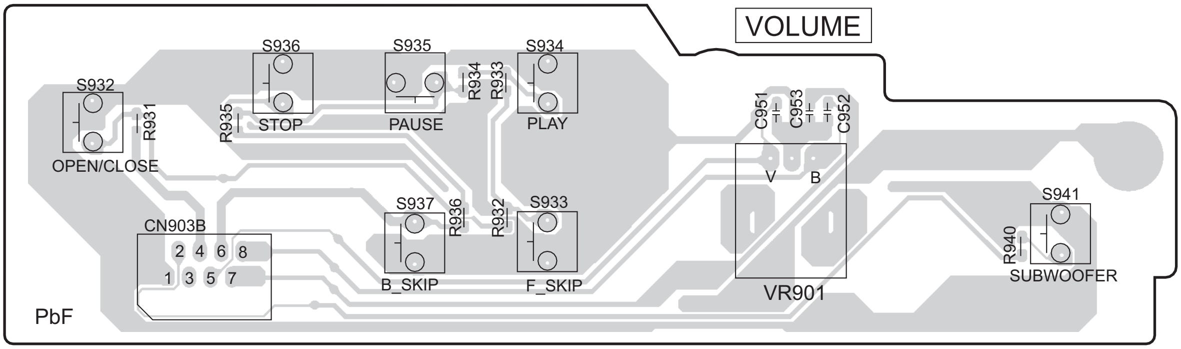
ACCESSORIES CASE
A1: Remote Control
A1-1: RC Battery Cover
A2: AC Cord
A3: O/I Book
A4: FM Antenna
A5: Video Cable
A6: System Cable
A8: Linear Antenna
A9: Clamper
A10: Screw


P3
ACCESSORIES CASE
P2
MAIN UNIT
SATELLITE SPEAKERS
P2
ACTIVE SUBWOOFER
P1

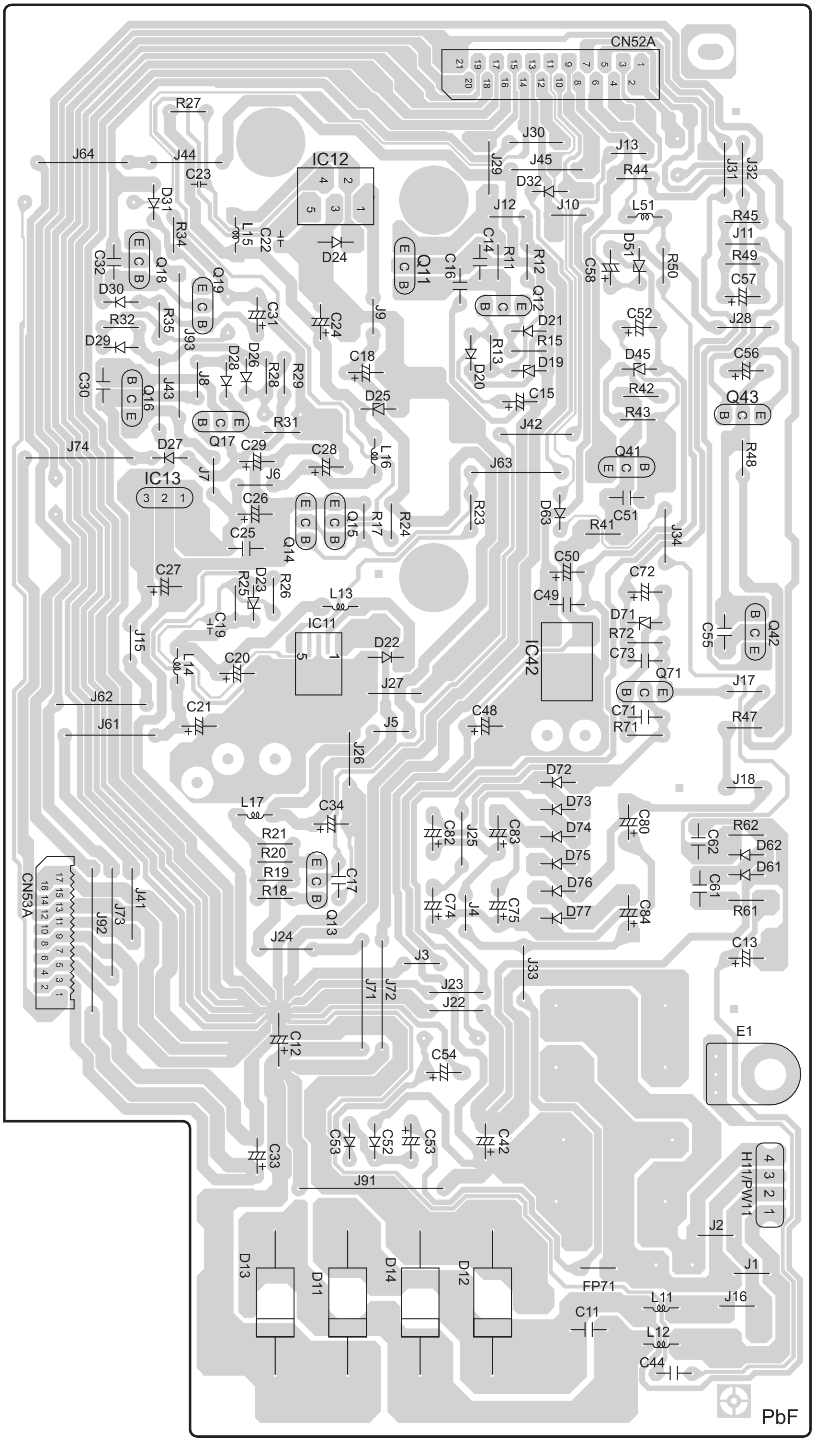
FLE0304D/K/J/E/A/L


G
H
I
J
K
L
M
56
J915
J914
J913
J912
J911
J910
J909
J908
J907
J906
J905
J904
J903
J902
J901
CN903A
1 3 5 7
2 4 6 8

J VOLUME P.C.B. (REPX0354A)


VOLUME
S936
S935
S934
R934
R933
S932
R931
R935
STOP
PAUSE
PLAY
OPEN/CLOSE
C951
C953
C952
V
B
S937
R936
R932
S933
S941
R940
CN903B
2 4 6 8
1 3 5 7
B_SKIP
F_SKIP
VR901
SUBWOOFER
PbF

I POWER SUPPLY P.C.B. (REP3432D)


A
B
C
D
E
F
G
1
2
3
4
5
6
7
8
9
CN52A
21 19 17 15 13 11 9 7 5 3 1
20 18 16 14 12 10 8 6 4 2
R27
J64
J44
C23
IC12
4 2
5 3 1
J30
J29
J45
J13
R44
J31
J32
D32
J12
J10
L51
R45
J11
R49
C57
D31
R34
L15
C22
D24
C14
R11
R12
D51
R50
C32
E C B
Q18
Q19
E C B
E C B
Q11
C16
C58
D30
C31
C24
J9
E C B
Q12
C52
J28
R32
R35
J93
D21
R15
D45
C56
D29
D28
D26
R28
R29
R13
D19
D20
C18
R42
C30
B C E
Q16
J43
J8
D25
C15
R43
Q43
B C E
B C E
Q17
R31
J42
J74
D27
C29
C28
L16
Q41
E C B
R48
IC13
3 2 1
J7
J6
J63
C26
E C B
E C B
R17
R24
R23
D63
C51
R41
J34
C25
Q14
Q15
C50
C27
R25
D23
R26
L13
C72
C49
D71
C19
IC11
5 1
R72
C55
B C E
Q42
J15
D22
C73
IC42
L14
C20
Q71
B C E
J17
J27
J62
C21
C48
C71
R47
J61
J5
R71
J26
D72
J18
L17
C34
D73
C80
C82
J25
C83
D74
R62
C62
D62
R21
R20
D75
D61
R19
E C B
C17
C61
R18
Q13
D76
CN53A
17 15 13 11 9 7 5 3 1
16 14 12 10 8 6 4 2
J41
J73
J92
C74
J4
C75
D77
C84
R61
J24
C13
J3
J33
J71
J72
J23
J22
E1
C12
C54
C53
C52
C53
C42
C33
H11/PW1
4 3 2 1
J91
J2
D13
D11
D14
D12
J1
FP71
C11
L11
J16
L12
C44
PbF

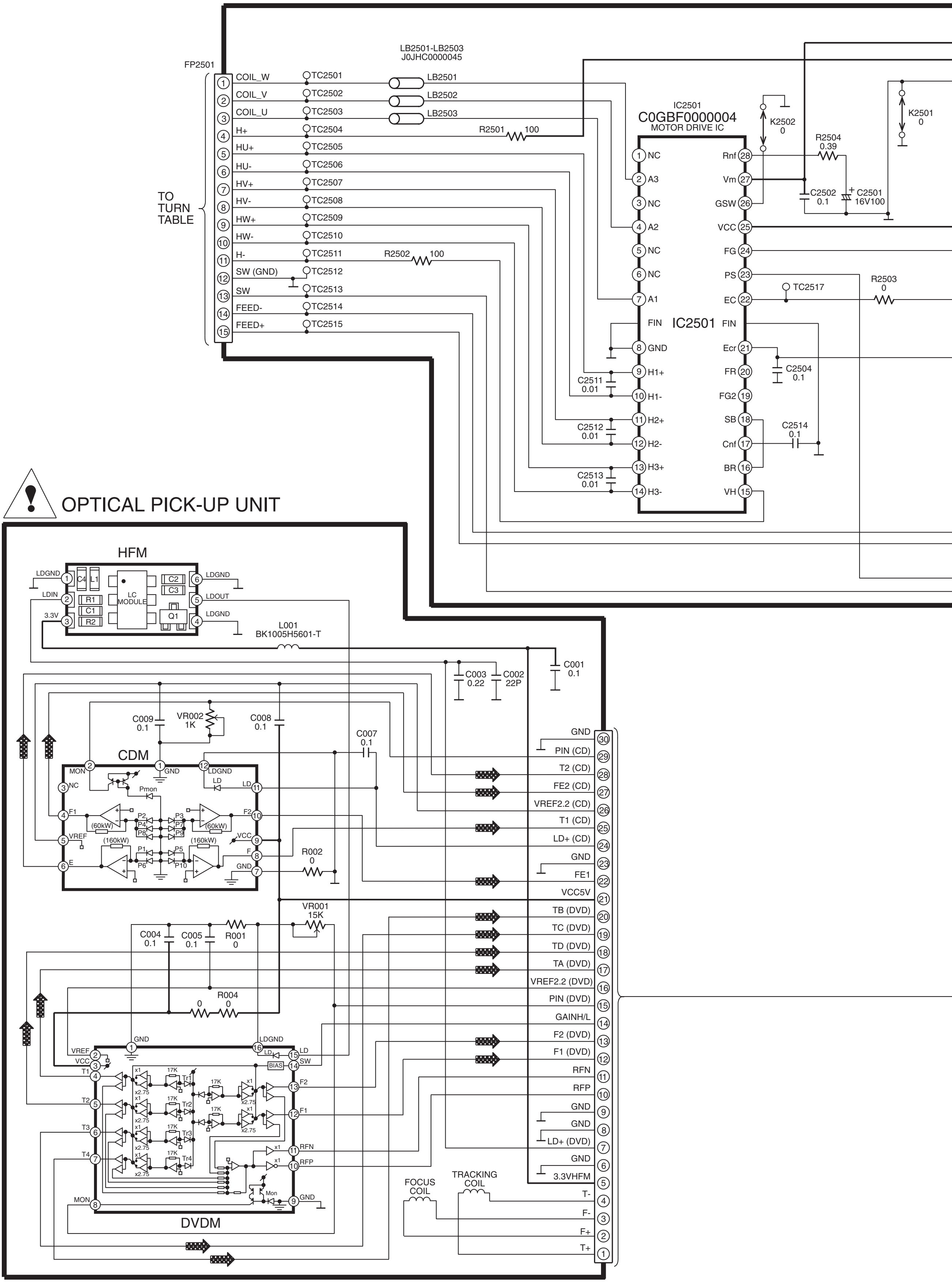
SCHEMATIC DIAGRAM-1

A Side A Side B

DVD MODULE (1) CIRCUIT

: +B SIGNAL LINE

: CD-DA SIGNAL LINE



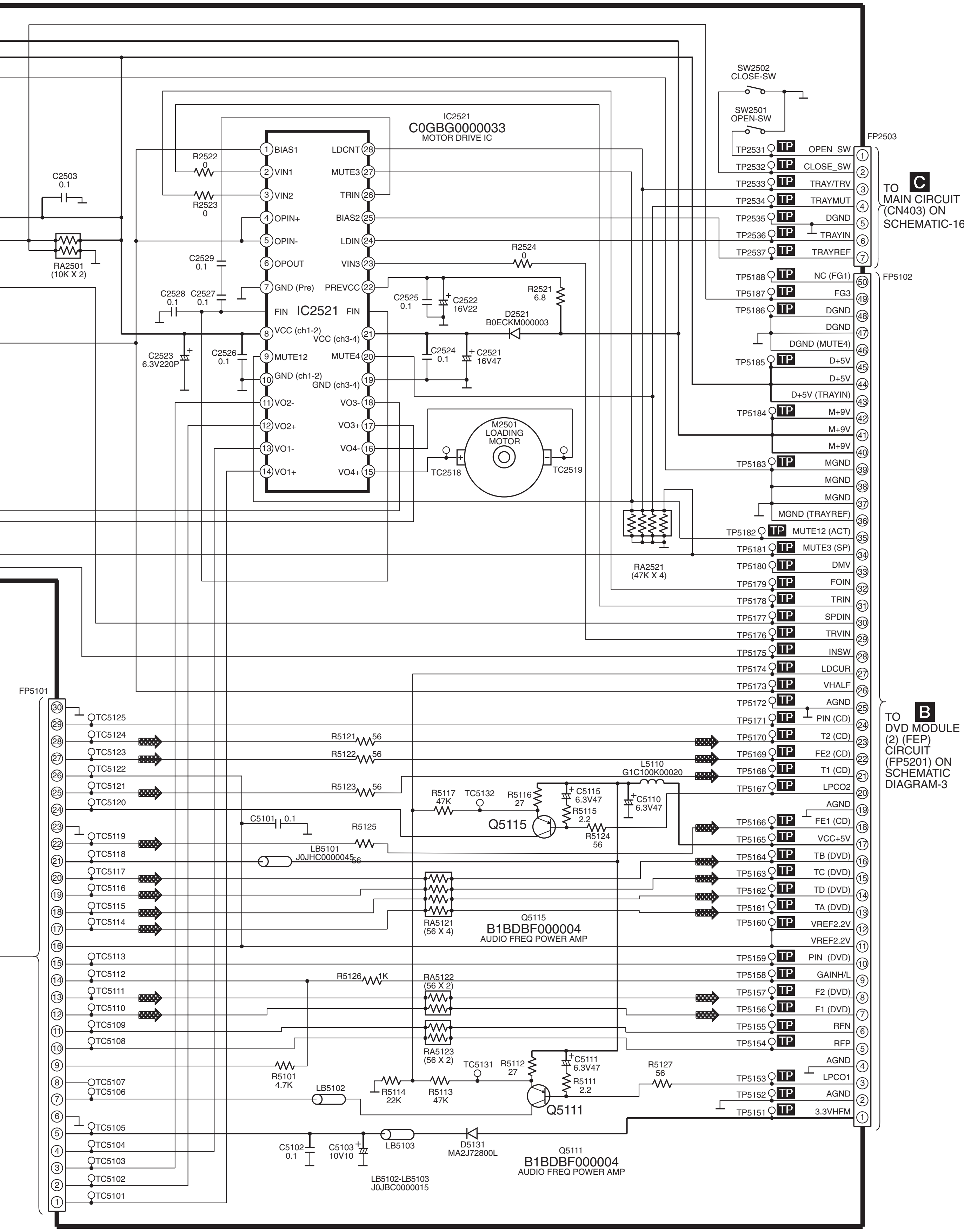
FP2501
TO TURN TABLE
COIL_W
COIL_V
COIL_U
H+
HU+
HU-
HV+
HV-
HW+
HW-
H-
SW (GND)
SW
FEED-
FEED+
TC2501
TC2502
TC2503
TC2504
TC2505
TC2506
TC2507
TC2508
TC2509
TC2510
TC2511
TC2512
TC2513
TC2514
TC2515
LB2501-LB2503
J0JHC0000045
LB2501
LB2502
LB2503
R2501 100
R2502 100
IC2501
C0GBF0000004
MOTOR DRIVE IC
NC
A3
NC
A2
NC
NC
A1
FIN
IC2501
GND
H1+
H1-
H2+
H2-
H3+
H3-
Rnf
Vm
GSW
VCC
FG
PS
EC
FIN
Ecr
FR
FG2
SB
Cnf
BR
VH
K2502 0
K2501 0
R2504 0.39
C2502 0.1
C2501 16V100
TC2517
R2503 0
C2504 0.1
C2514 0.1
C2511 0.01
C2512 0.01
C2513 0.01
OPTICAL PICK-UP UNIT
HFM
LDGND
LDIN
3.3V
C4
L1
R1
C1
R2
LC MODULE
C2
C3
Q1
LDGND
LDOUT
LDGND
L001
BK1005H5601-T
C001 0.1
C003 0.22
C002 22P
C009 0.1
VR002 1K
C008 0.1
C007 0.1
CDM
MON
NC
F1
VREF
E
GND
LDGND
LD
Pmon
LD
F2
VCC
F
GND
(60kW)
(160kW)
P1 P2 P3 P4 P5 P6 P7 P8 P9 P10
R002 0
VR001 15K
C004 0.1
C005 0.1
R001 0
R004
0 0
DVDM
GND
LDGND
VREF
VCC
T1
T2
T3
T4
MON
LD
SW
F2
F1
RFN
RFP
GND
BIAS
17K
Tr1 Tr2 Tr3 Tr4
x1
x2.75
Mon
FOCUS COIL
TRACKING COIL
GND
PIN (CD)
T2 (CD)
FE2 (CD)
VREF2.2 (CD)
T1 (CD)
LD+ (CD)
GND
FE1
VCC5V
TB (DVD)
TC (DVD)
TD (DVD)
TA (DVD)
VREF2.2 (DVD)
PIN (DVD)
GAINH/L
F2 (DVD)
F1 (DVD)
RFN
RFP
GND
GND
LD+ (DVD)
GND
3.3VHFM
T-
F-
F+
T+

SCHEMATIC DIAGRAM-2

A DVD MODULE (1) CIRCUIT

: +B SIGNAL LINE

: CD-DA SIGNAL LINE


IC2521
C0GBG0000033
MOTOR DRIVE IC
IC2521
1 BIAS1
2 VIN1
3 VIN2
4 OPIN+
5 OPIN-
6 OPOUT
7 GND (Pre)
FIN
8 VCC (ch1-2)
9 MUTE12
10 GND (ch1-2)
11 VO2-
12 VO2+
13 VO1-
14 VO1+
28 LDCNT
27 MUTE3
26 TRIN
25 BIAS2
24 LDIN
23 VIN3
22 PREVCC
FIN
21 VCC (ch3-4)
20 MUTE4
19 GND (ch3-4)
18 VO3-
17 VO3+
16 VO4-
15 VO4+
R2522 0
R2523 0
C2503 0.1
RA2501 (10K X 2)
C2529 0.1
C2528 0.1
C2527 0.1
C2523 6.3V220P
C2526 0.1
C2525 0.1
C2522 16V22
R2524 0
R2521 6.8
D2521 B0ECKM000003
C2524 0.1
C2521 16V47
M2501 LOADING MOTOR
TC2518
TC2519
RA2521 (47K X 4)
SW2502 CLOSE-SW
SW2501 OPEN-SW
FP2503
TP2531 TP OPEN_SW 1
TP2532 TP CLOSE_SW 2
TP2533 TP TRAY/TRV 3
TP2534 TP TRAYMUT 4
TP2535 TP DGND 5
TP2536 TP TRAYIN 6
TP2537 TP TRAYREF 7
TO C MAIN CIRCUIT (CN403) ON SCHEMATIC-16
FP5102
TP5188 TP NC (FG1) 50
TP5187 TP FG3 49
TP5186 TP DGND 48
DGND 47
DGND (MUTE4) 46
TP5185 TP D+5V 45
D+5V 44
D+5V (TRAYIN) 43
TP5184 TP M+9V 42
M+9V 41
M+9V 40
TP5183 TP MGND 39
MGND 38
MGND 37
MGND (TRAYREF) 36
TP5182 TP MUTE12 (ACT) 35
TP5181 TP MUTE3 (SP) 34
TP5180 TP DMV 33
TP5179 TP FOIN 32
TP5178 TP TRIN 31
TP5177 TP SPDIN 30
TP5176 TP TRVIN 29
TP5175 TP INSW 28
TP5174 TP LDCUR 27
TP5173 TP VHALF 26
TP5172 TP AGND 25
TP5171 TP PIN (CD) 24
TP5170 TP T2 (CD) 23
TP5169 TP FE2 (CD) 22
TP5168 TP T1 (CD) 21
TP5167 TP LPCO2 20
AGND 19
TP5166 TP FE1 (CD) 18
TP5165 TP VCC+5V 17
TP5164 TP TB (DVD) 16
TP5163 TP TC (DVD) 15
TP5162 TP TD (DVD) 14
TP5161 TP TA (DVD) 13
TP5160 TP VREF2.2V 12
VREF2.2V 11
TP5159 TP PIN (DVD) 10
TP5158 TP GAINH/L 9
TP5157 TP F2 (DVD) 8
TP5156 TP F1 (DVD) 7
TP5155 TP RFN 6
TP5154 TP RFP 5
AGND 4
TP5153 TP LPCO1 3
TP5152 TP AGND 2
TP5151 TP 3.3VHFM 1
TO B DVD MODULE (2) (FEP) CIRCUIT (FP5201) ON SCHEMATIC DIAGRAM-3
FP5101
30 TC5125
29
28 TC5124
27 TC5123
26 TC5122
25 TC5121
24 TC5120
23
22 TC5119
21 TC5118
20 TC5117
19 TC5116
18 TC5115
17 TC5114
16
15 TC5113
14 TC5112
13 TC5111
12 TC5110
11 TC5109
10 TC5108
9
8 TC5107
7 TC5106
6
5 TC5105
4 TC5104
3 TC5103
2 TC5102
1 TC5101
R5121 56
R5122 56
R5123 56
L5110 G1C100K00020
R5117 47K
TC5132
R5116 27
C5115 6.3V47
R5115 2.2
C5110 6.3V47
Q5115
R5124 56
C5101 0.1
R5125
LB5101 J0JHC0000045
56
RA5121 (56 X 4)
Q5115
B1BDBF000004
AUDIO FREQ POWER AMP
R5126 1K
RA5122 (56 X 2)
RA5123 (56 X 2)
TC5131
R5112 27
C5111 6.3V47
R5111 2.2
R5127 56
R5101 4.7K
LB5102
R5114 22K
R5113 47K
Q5111
C5102 0.1
C5103 10V10
LB5103
D5131 MA2J72800L
Q5111
B1BDBF000004
AUDIO FREQ POWER AMP
LB5102-LB5103
J0JBC0000015

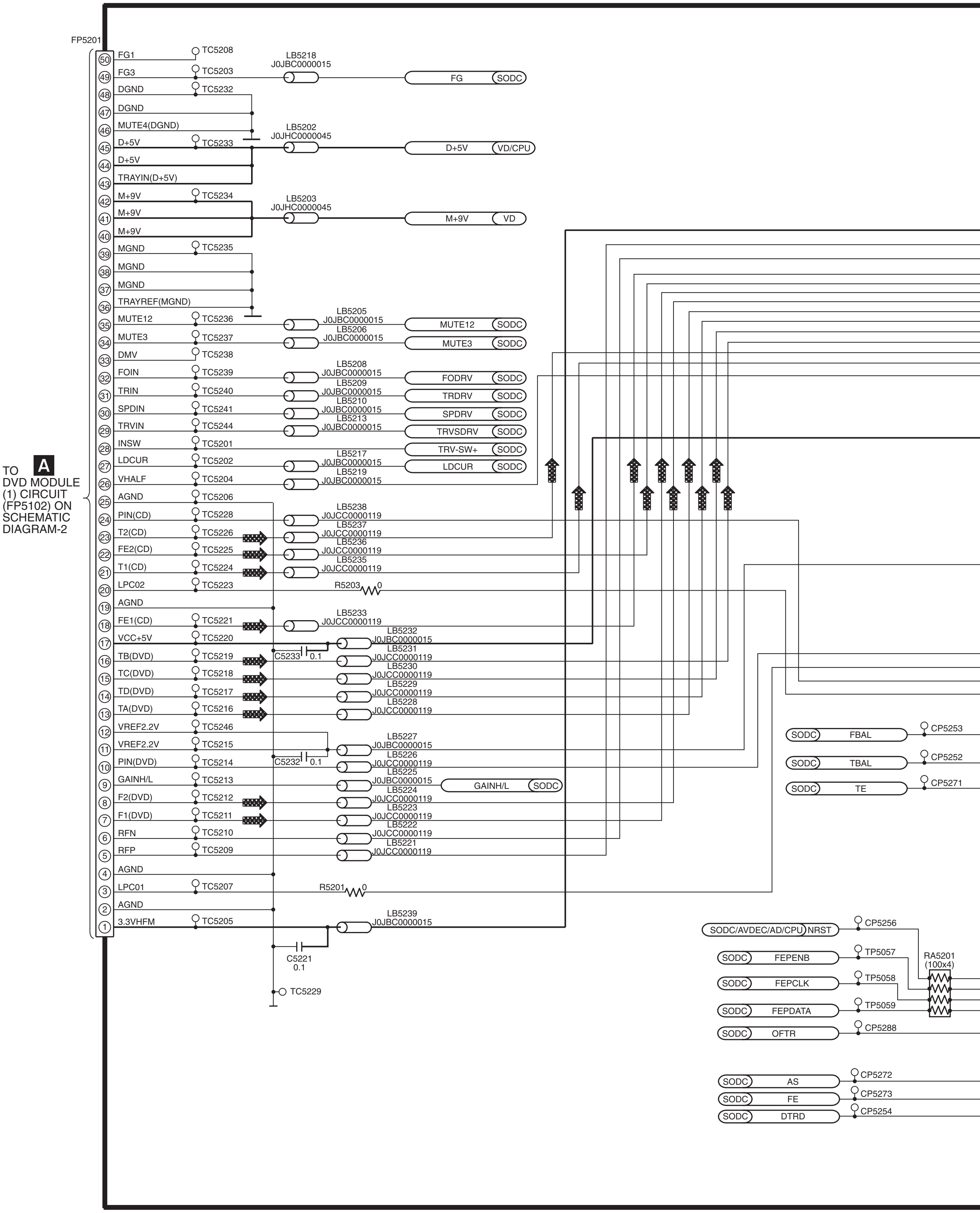
SCHEMATIC DIAGRAM-3

B Side A Side B

DVD MODULE (2) (FEP) CIRCUIT

: +B SIGNAL LINE

▨ : CD-DA SIGNAL LINE

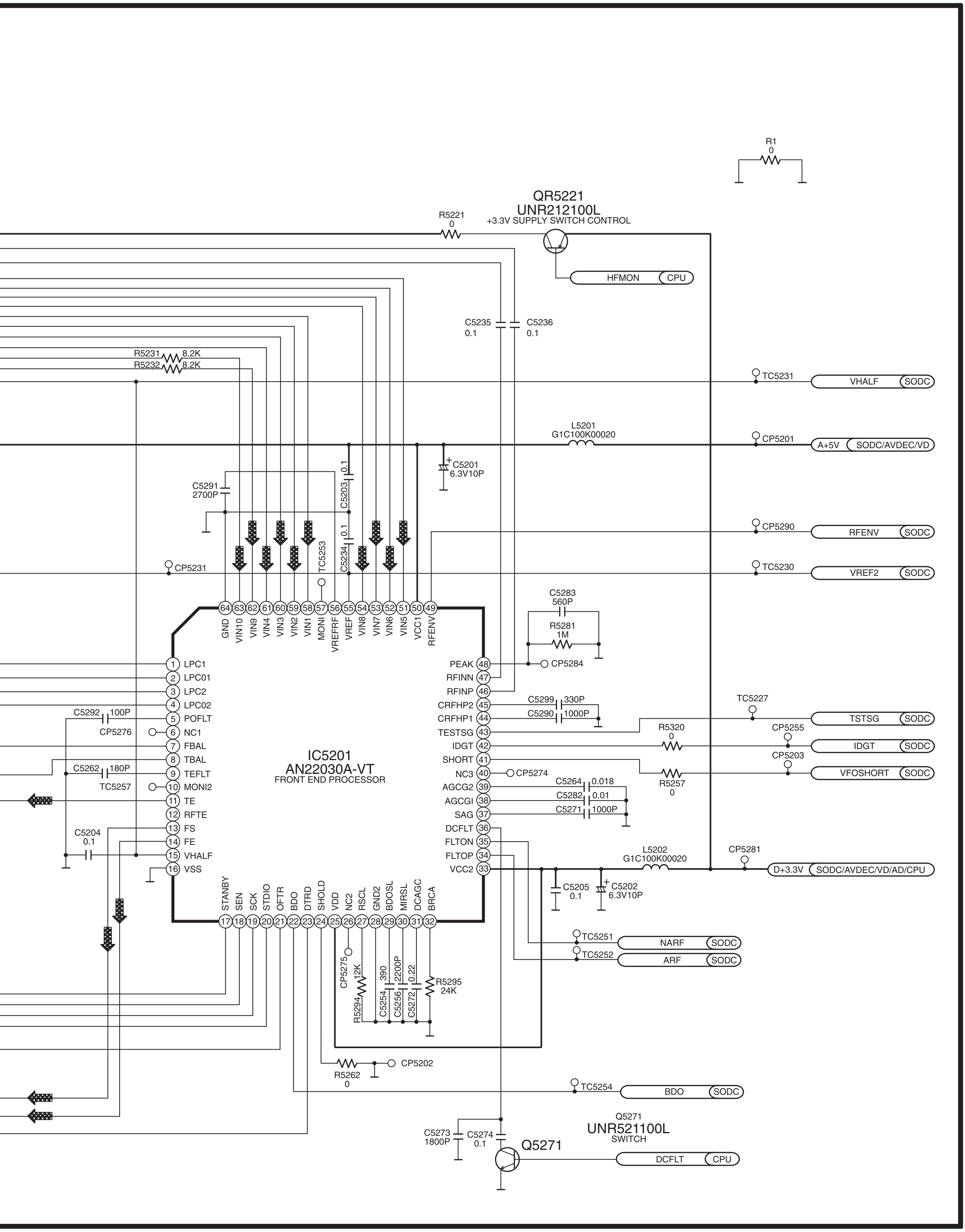

FP5201
TO
A
DVD MODULE
(1) CIRCUIT
(FP5102) ON
SCHEMATIC
DIAGRAM-2
㊿ FG1 TC5208
(49) FG3 TC5203
(48) DGND TC5232
(47) DGND
(46) MUTE4(DGND)
(45) D+5V TC5233
(44) D+5V
(43) TRAYIN(D+5V)
(42) M+9V TC5234
(41) M+9V
(40) M+9V
(39) MGND TC5235
(38) MGND
(37) MGND
(36) TRAYREF(MGND)
(35) MUTE12 TC5236
(34) MUTE3 TC5237
(33) DMV TC5238
(32) FOIN TC5239
(31) TRIN TC5240
(30) SPDIN TC5241
(29) TRVIN TC5244
(28) INSW TC5201
(27) LDCUR TC5202
(26) VHALF TC5204
(25) AGND TC5206
(24) PIN(CD) TC5228
(23) T2(CD) TC5226
(22) FE2(CD) TC5225
(21) T1(CD) TC5224
(20) LPC02 TC5223
(19) AGND
(18) FE1(CD) TC5221
(17) VCC+5V TC5220
(16) TB(DVD) TC5219
(15) TC(DVD) TC5218
(14) TD(DVD) TC5217
(13) TA(DVD) TC5216
(12) VREF2.2V TC5246
(11) VREF2.2V TC5215
(10) PIN(DVD) TC5214
(9) GAINH/L TC5213
(8) F2(DVD) TC5212
(7) F1(DVD) TC5211
(6) RFN TC5210
(5) RFP TC5209
(4) AGND
(3) LPC01 TC5207
(2) AGND
(1) 3.3VHFM TC5205
LB5218 J0JBC0000015
FG SODC
LB5202 J0JHC0000045
D+5V VD/CPU
LB5203 J0JHC0000045
M+9V VD
LB5205 J0JBC0000015
MUTE12 SODC
LB5206 J0JBC0000015
MUTE3 SODC
LB5208 J0JBC0000015
FODRV SODC
LB5209 J0JBC0000015
TRDRV SODC
LB5210 J0JBC0000015
SPDRV SODC
LB5213 J0JBC0000015
TRVSDRV SODC
TRV-SW+ SODC
LB5217 J0JBC0000015
LDCUR SODC
LB5219 J0JBC0000015
LB5238 J0JCC0000119
LB5237 J0JCC0000119
LB5236 J0JCC0000119
LB5235 J0JCC0000119
R5203 0
LB5233 J0JCC0000119
LB5232 J0JBC0000015
C5233 0.1
LB5231 J0JCC0000119
LB5230 J0JCC0000119
LB5229 J0JCC0000119
LB5228 J0JCC0000119
LB5227 J0JBC0000015
C5232 0.1
LB5226 J0JCC0000119
LB5225 J0JBC0000015
GAINH/L SODC
LB5224 J0JCC0000119
LB5223 J0JCC0000119
LB5222 J0JCC0000119
LB5221 J0JCC0000119
R5201 0
LB5239 J0JBC0000015
C5221 0.1
TC5229
SODC FBAL CP5253
SODC TBAL CP5252
SODC TE CP5271
SODC/AVDEC/AD/CPU NRST CP5256
SODC FEPENB TP5057
SODC FEPCLK TP5058
SODC FEPDATA TP5059
RA5201 (100x4)
SODC OFTR CP5288
SODC AS CP5272
SODC FE CP5273
SODC DTRD CP5254

SCHEMATIC DIAGRAM-4

B DVD MODULE (2) (FEP) CIRCUIT

— : +B SIGNAL LINE

▨ : CD-DA SIGNAL LINE

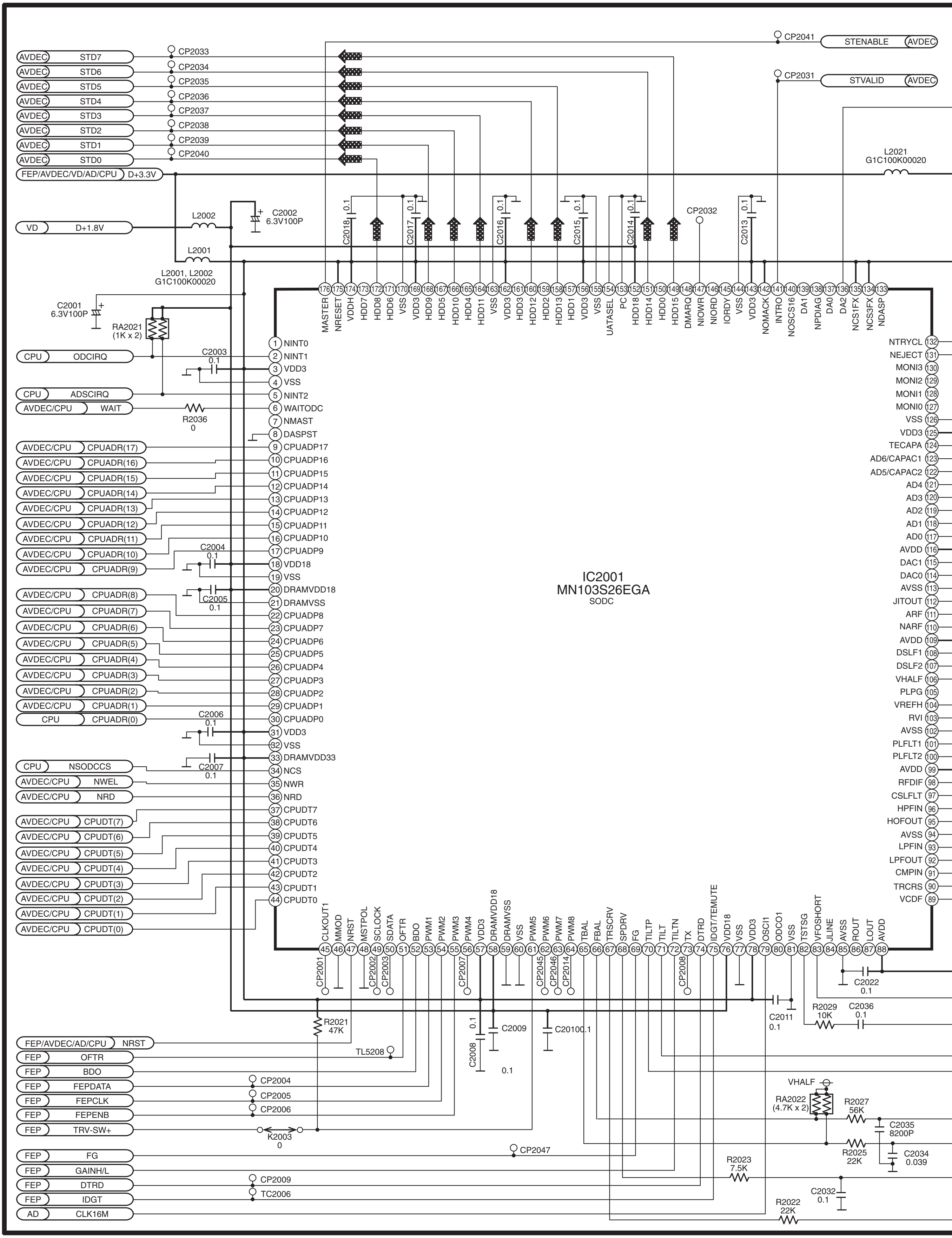

R1
0
QR5221
UNR212100L
+3.3V SUPPLY SWITCH CONTROL
R5221
0
HFMON
CPU
C5235
0.1
C5236
0.1
R5231 8.2K
R5232 8.2K
TC5231
VHALF
SODC
L5201
G1C100K00020
CP5201
A+5V
SODC/AVDEC/VD
C5201
6.3V10P
C5291
2700P
C5203 0.1
C5234 0.1
TC5253
CP5290
RFENV
SODC
CP5231
TC5230
VREF2
SODC
C5283
560P
R5281
1M
CP5284
64 GND
63 VIN10
62 VIN9
61 VIN4
60 VIN3
59 VIN2
58 VIN1
57 MONI
56 VREFRF
55 VREF
54 VIN8
53 VIN7
52 VIN6
51 VIN5
50 VCC1
49 RFENV
1 LPC1
2 LPC01
3 LPC2
4 LPC02
5 POFLT
6 NC1
7 FBAL
8 TBAL
9 TEFLT
10 MONI2
11 TE
12 RFTE
13 FS
14 FE
15 VHALF
16 VSS
PEAK 48
RFINN 47
RFINP 46
CRFHP2 45
CRFHP1 44
TESTSG 43
IDGT 42
SHORT 41
NC3 40
AGCG2 39
AGCGI 38
SAG 37
DCFLT 36
FLTON 35
FLTOP 34
VCC2 33
IC5201
AN22030A-VT
FRONT END PROCESSOR
C5292 100P
CP5276
C5262 180P
TC5257
C5204
0.1
C5299 330P
C5290 1000P
TC5227
TSTSG
SODC
R5320
0
CP5255
IDGT
SODC
CP5203
VFOSHORT
SODC
R5257
0
CP5274
C5264 0.018
C5282 0.01
C5271 1000P
L5202
G1C100K00020
CP5281
D+3.3V
SODC/AVDEC/VD/AD/CPU
C5205
0.1
C5202
6.3V10P
17 STANBY
18 SEN
19 SCK
20 STDIO
21 OFTR
22 BDO
23 DTRD
24 SHOLD
25 VDD
26 NC2
27 RSCL
28 GND2
29 BDOSL
30 MIRSL
31 DCAGC
32 BRCA
TC5251
NARF
SODC
TC5252
ARF
SODC
CP5275
R5294 12K
C5254 390
C5256 2200P
C5272 0.22
R5295
24K
R5262
0
CP5202
TC5254
BDO
SODC
C5273
1800P
C5274
0.1
Q5271
Q5271
UNR521100L
SWITCH
DCFLT
CPU

SCHEMATIC DIAGRAM-5

B DVD MODULE (2) (SODC) CIRCUIT

: +B SIGNAL LINE

: CD-DA SIGNAL LINE



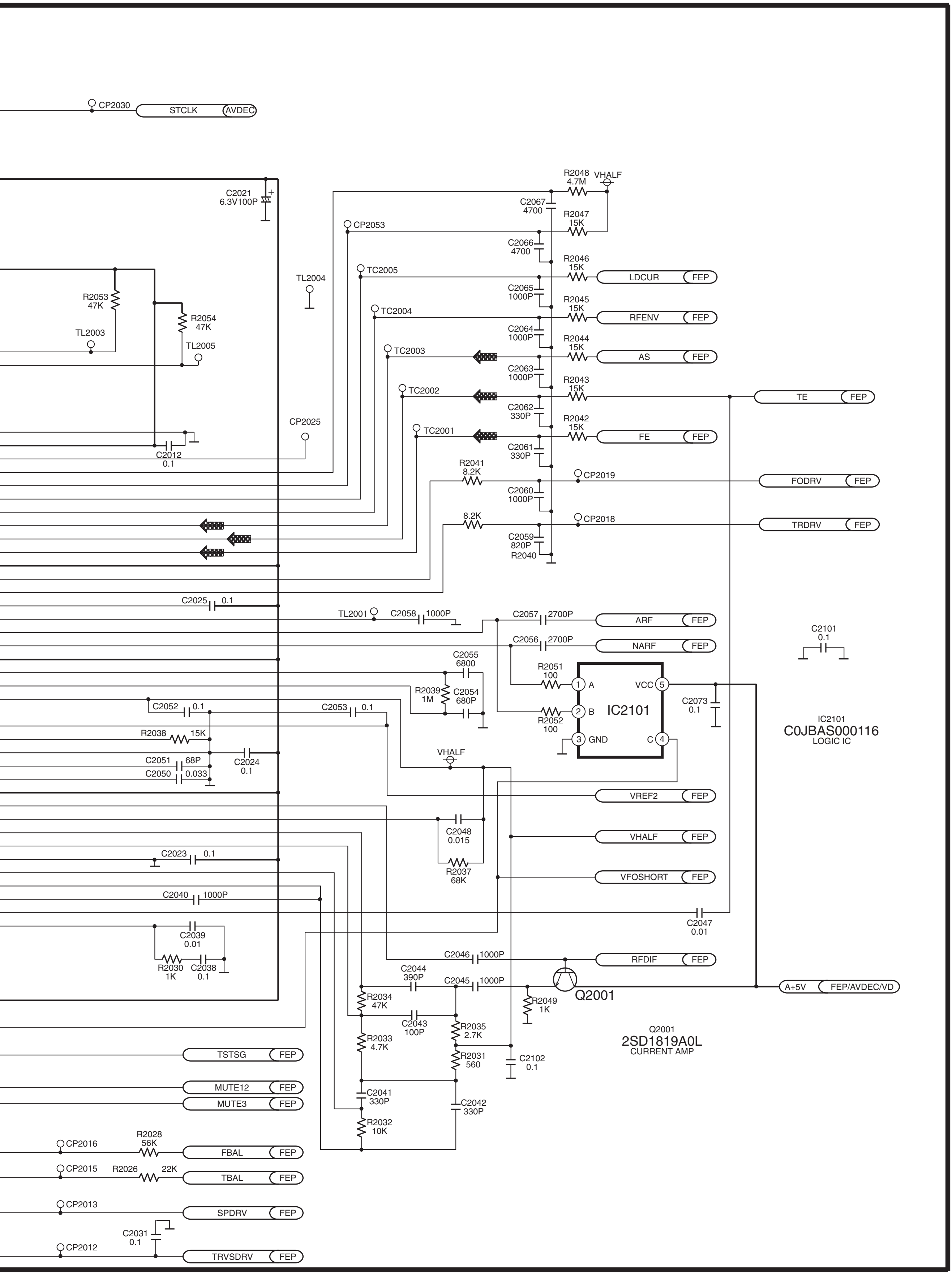
AVDEC STD7
AVDEC STD6
AVDEC STD5
AVDEC STD4
AVDEC STD3
AVDEC STD2
AVDEC STD1
AVDEC STD0
CP2033
CP2034
CP2035
CP2036
CP2037
CP2038
CP2039
CP2040
CP2041
STENABLE AVDEC
CP2031
STVALID AVDEC
FEP/AVDEC/VD/AD/CPU D+3.3V
L2021
G1C100K00020
VD D+1.8V
L2002
C2002
6.3V100P
L2001
L2001, L2002
G1C100K00020
C2001
6.3V100P
RA2021
(1K x 2)
C2018 0.1
C2017 0.1
C2016 0.1
C2015 0.1
C2014 0.1
C2013 0.1
CP2032
CPU ODCIRQ
CPU ADSCIRQ
AVDEC/CPU WAIT
R2036
0
C2003
0.1
C2004
0.1
C2005
0.1
C2006
0.1
C2007
0.1
AVDEC/CPU CPUADR(17)
AVDEC/CPU CPUADR(16)
AVDEC/CPU CPUADR(15)
AVDEC/CPU CPUADR(14)
AVDEC/CPU CPUADR(13)
AVDEC/CPU CPUADR(12)
AVDEC/CPU CPUADR(11)
AVDEC/CPU CPUADR(10)
AVDEC/CPU CPUADR(9)
AVDEC/CPU CPUADR(8)
AVDEC/CPU CPUADR(7)
AVDEC/CPU CPUADR(6)
AVDEC/CPU CPUADR(5)
AVDEC/CPU CPUADR(4)
AVDEC/CPU CPUADR(3)
AVDEC/CPU CPUADR(2)
AVDEC/CPU CPUADR(1)
CPU CPUADR(0)
CPU NSODCCS
AVDEC/CPU NWEL
AVDEC/CPU NRD
AVDEC/CPU CPUDT(7)
AVDEC/CPU CPUDT(6)
AVDEC/CPU CPUDT(5)
AVDEC/CPU CPUDT(4)
AVDEC/CPU CPUDT(3)
AVDEC/CPU CPUDT(2)
AVDEC/CPU CPUDT(1)
AVDEC/CPU CPUDT(0)
IC2001
MN103S26EGA
SODC
1 NINT0
2 NINT1
3 VDD3
4 VSS
5 NINT2
6 WAITODC
7 NMAST
8 DASPST
9 CPUADP17
10 CPUADP16
11 CPUADP15
12 CPUADP14
13 CPUADP13
14 CPUADP12
15 CPUADP11
16 CPUADP10
17 CPUADP9
18 VDD18
19 VSS
20 DRAMVDD18
21 DRAMVSS
22 CPUADP8
23 CPUADP7
24 CPUADP6
25 CPUADP5
26 CPUADP4
27 CPUADP3
28 CPUADP2
29 CPUADP1
30 CPUADP0
31 VDD3
32 VSS
33 DRAMVDD33
34 NCS
35 NWR
36 NRD
37 CPUDT7
38 CPUDT6
39 CPUDT5
40 CPUDT4
41 CPUDT3
42 CPUDT2
43 CPUDT1
44 CPUDT0
45 CLKOUT1
46 MMOD
47 NRST
48 MSTPOL
49 SCLOCK
50 SDATA
51 OFTR
52 BDO
53 PWM1
54 PWM2
55 PWM3
56 PWM4
57 VDD3
58 DRAMVDD18
59 DRAMVSS
60 VSS
61 PWM5
62 PWM6
63 PWM7
64 PWM8
65 TBAL
66 FBAL
67 TRSCRV
68 SPDRV
69 FG
70 TILTP
71 TILT
72 TILTN
73 TX
74 DTRD
75 IDGT/TEMUTE
76 VDD18
77 VSS
78 VDD3
79 OSCI1
80 ODCO1
81 VSS
82 TSTSG
83 VFOSHORT
84 JLINE
85 AVSS
86 ROUT
87 LOUT
88 AVDD
89 VCDF
90 TRCRS
91 CMPIN
92 LPFOUT
93 LPFIN
94 AVSS
95 HOFOUT
96 HPFIN
97 CSLFLT
98 RFDIF
99 AVDD
100 PLFLT2
101 PLFLT1
102 AVSS
103 RVI
104 VREFH
105 PLPG
106 VHALF
107 DSLF2
108 DSLF1
109 AVDD
110 NARF
111 ARF
112 JITOUT
113 AVSS
114 DAC0
115 DAC1
116 AVDD
117 AD0
118 AD1
119 AD2
120 AD3
121 AD4
122 AD5/CAPAC2
123 AD6/CAPAC1
124 TECAPA
125 VDD3
126 VSS
127 MONI0
128 MONI1
129 MONI2
130 MONI3
131 NEJECT
132 NTRYCL
133 NDASP
134 NCS3FX
135 NCS1FX
136 DA2
137 DA0
138 NPDIAG
139 DA1
140 NOSCS16
141 INTRO
142 NOMACK
143 VDD3
144 VSS
145 IORDY
146 NIORD
147 NIOWR
148 DMARQ
149 HDD15
150 HDD0
151 HDD14
152 HDD18
153 PC
154 UATASEL
155 VSS
156 VDD3
157 HDD1
158 HDD13
159 HDD2
160 HDD12
161 HDD3
162 VDD3
163 VSS
164 HDD11
165 HDD4
166 HDD10
167 HDD5
168 HDD9
169 VDD3
170 VSS
171 HDD6
172 HDD8
173 HDD7
174 VDDH
175 NRESET
176 MASTER
CP2001
CP2002
CP2003
CP2007
CP2045
CP2046
CP2014
CP2008
C2022
0.1
C2011
0.1
R2029
10K
C2036
0.1
R2021
47K
C2008
0.1
C2009
0.1
C2010 0.1
FEP/AVDEC/AD/CPU NRST
FEP OFTR
FEP BDO
FEP FEPDATA
FEP FEPCLK
FEP FEPENB
FEP TRV-SW+
FEP FG
FEP GAINH/L
FEP DTRD
FEP IDGT
AD CLK16M
TL5208
CP2004
CP2005
CP2006
K2003
0
CP2047
CP2009
TC2006
VHALF
RA2022
(4.7K x 2)
R2027
56K
C2035
8200P
R2025
22K
C2034
0.039
R2023
7.5K
C2032
0.1
R2022
22K

SCHEMATIC DIAGRAM-6

B DVD MODULE (2) (SODC) CIRCUIT

— : +B SIGNAL LINE

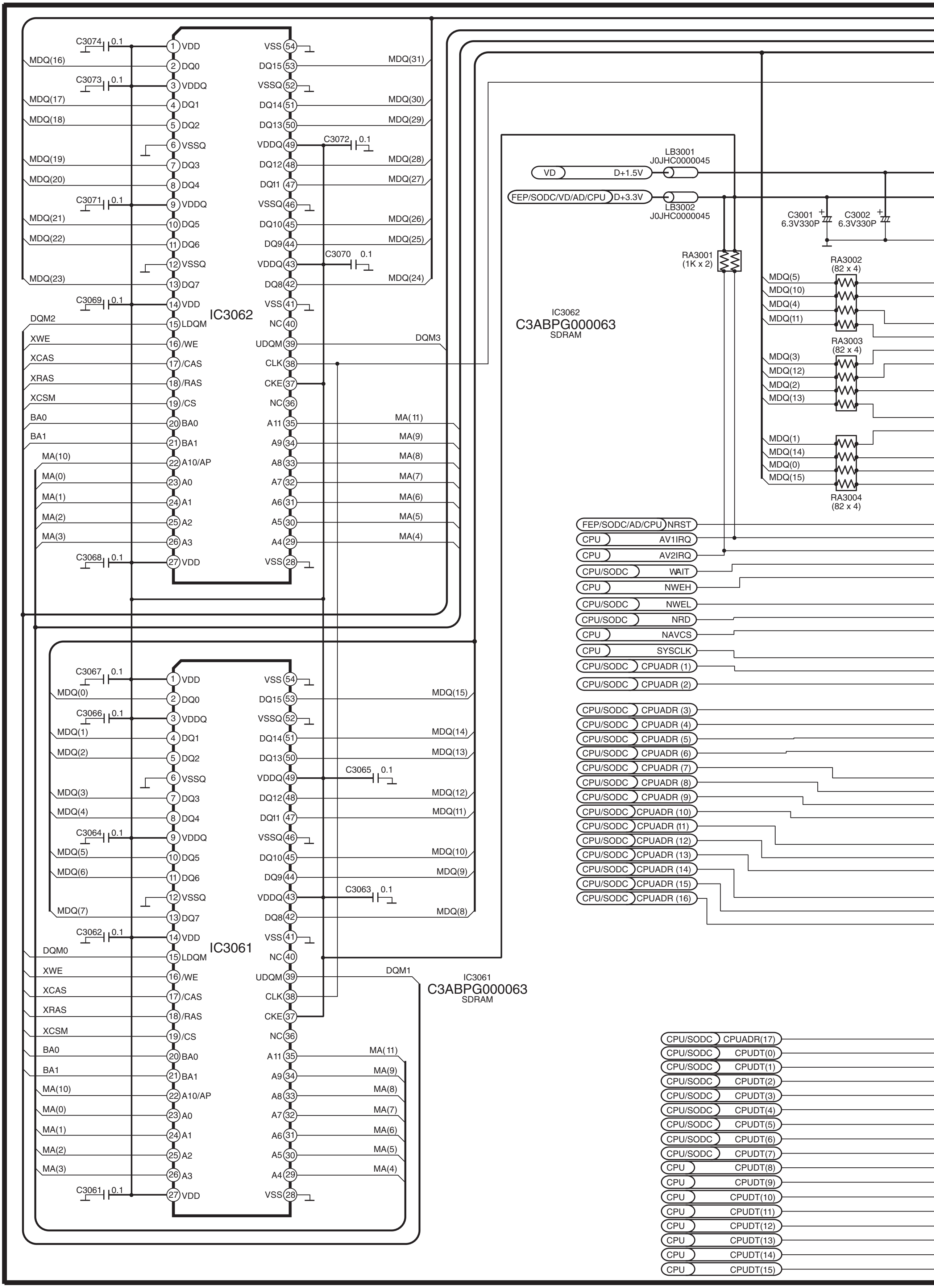
⇨ : CD-DA SIGNAL LINE


CP2030
STCLK
AVDEC
C2021
6.3V100P
R2048
4.7M
VHALF
C2067
4700
R2047
15K
CP2053
C2066
4700
R2046
15K
TC2005
LDCUR
FEP
TL2004
R2053
47K
C2065
1000P
R2045
15K
TC2004
R2054
47K
RFENV
FEP
TL2003
C2064
1000P
R2044
15K
TL2005
TC2003
AS
FEP
C2063
1000P
R2043
15K
TC2002
TE
FEP
C2062
330P
R2042
15K
CP2025
TC2001
FE
FEP
C2012
0.1
C2061
330P
R2041
8.2K
CP2019
C2060
1000P
FODRV
FEP
8.2K
CP2018
TRDRV
FEP
C2059
820P
R2040
C2025
0.1
TL2001
C2058
1000P
C2057
2700P
ARF
FEP
C2101
0.1
C2056
2700P
NARF
FEP
C2055
6800
R2051
100
R2039
1M
C2054
680P
1
A
VCC
5
IC2101
C2052
0.1
C2053
0.1
2
B
C2073
0.1
IC2101
C0JBAS000116
LOGIC IC
R2038
15K
R2052
100
3
GND
C
4
C2051
68P
C2024
0.1
VHALF
C2050
0.033
VREF2
FEP
C2048
0.015
VHALF
FEP
C2023
0.1
R2037
68K
VFOSHORT
FEP
C2040
1000P
C2047
0.01
C2039
0.01
R2030
1K
C2038
0.1
C2046
1000P
RFDIF
FEP
C2044
390P
C2045
1000P
A+5V
FEP/AVDEC/VD
R2034
47K
R2049
1K
Q2001
C2043
100P
R2035
2.7K
Q2001
2SD1819A0L
CURRENT AMP
R2033
4.7K
R2031
560
C2102
0.1
TSTSG
FEP
C2041
330P
MUTE12
FEP
C2042
330P
MUTE3
FEP
R2032
10K
R2028
56K
CP2016
FBAL
FEP
CP2015
R2026
22K
TBAL
FEP
CP2013
SPDRV
FEP
C2031
0.1
CP2012
TRVSDRV
FEP

SCHEMATIC DIAGRAM-7

B DVD MODULE (2) (AVDEC) CIRCUIT

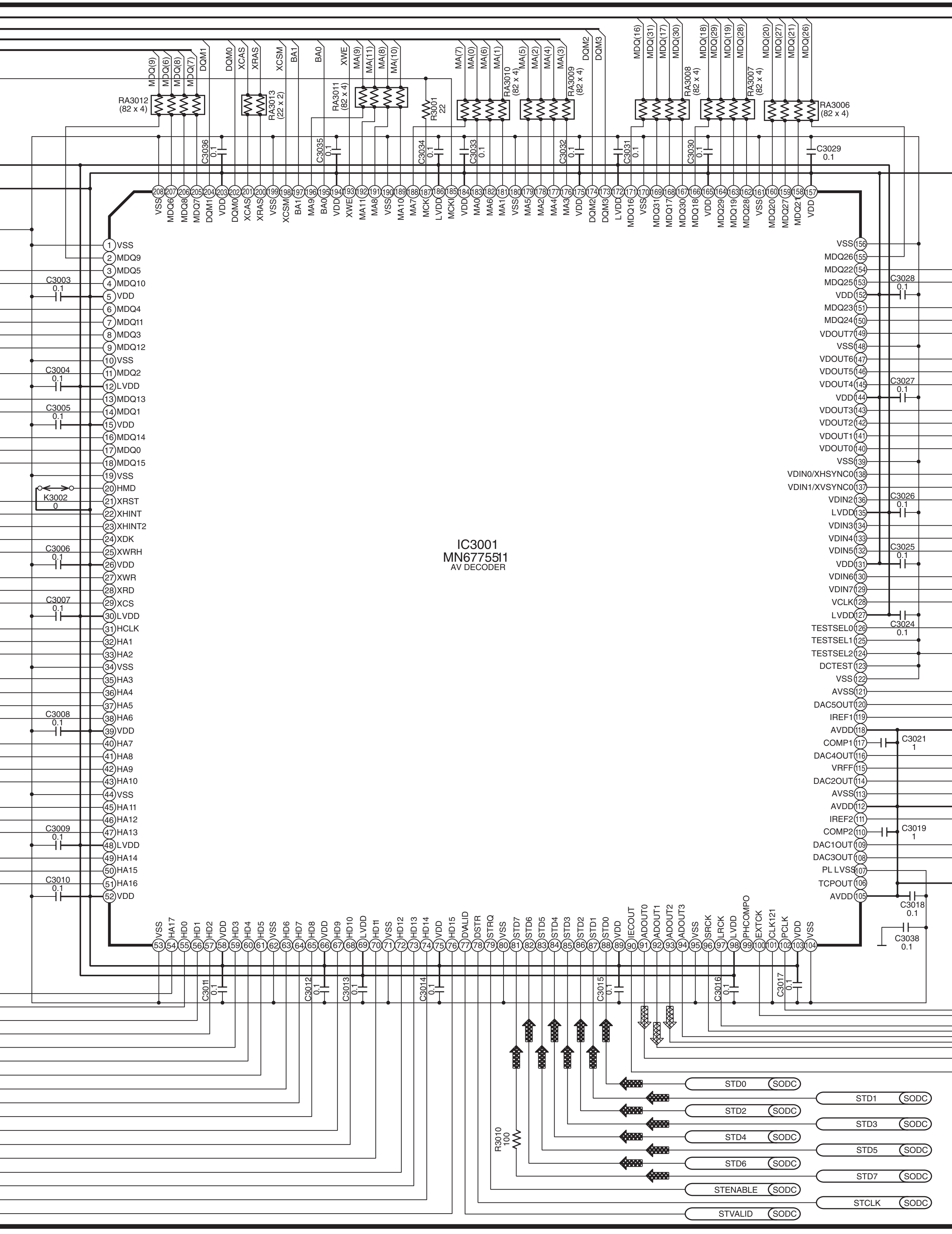
: +B SIGNAL LINE


C3074 0.1
C3073 0.1
C3072 0.1
C3071 0.1
C3070 0.1
C3069 0.1
C3068 0.1
IC3062
1 VDD
2 DQ0
3 VDDQ
4 DQ1
5 DQ2
6 VSSQ
7 DQ3
8 DQ4
9 VDDQ
10 DQ5
11 DQ6
12 VSSQ
13 DQ7
14 VDD
15 LDQM
16 /WE
17 /CAS
18 /RAS
19 /CS
20 BA0
21 BA1
22 A10/AP
23 A0
24 A1
25 A2
26 A3
27 VDD
VSS 54
DQ15 53
VSSQ 52
DQ14 51
DQ13 50
VDDQ 49
DQ12 48
DQ11 47
VSSQ 46
DQ10 45
DQ9 44
VDDQ 43
DQ8 42
VSS 41
NC 40
UDQM 39
CLK 38
CKE 37
NC 36
A11 35
A9 34
A8 33
A7 32
A6 31
A5 30
A4 29
VSS 28
MDQ(16)
MDQ(17)
MDQ(18)
MDQ(19)
MDQ(20)
MDQ(21)
MDQ(22)
MDQ(23)
MDQ(31)
MDQ(30)
MDQ(29)
MDQ(28)
MDQ(27)
MDQ(26)
MDQ(25)
MDQ(24)
DQM2
XWE
XCAS
XRAS
XCSM
BA0
BA1
MA(10)
MA(0)
MA(1)
MA(2)
MA(3)
DQM3
MA(11)
MA(9)
MA(8)
MA(7)
MA(6)
MA(5)
MA(4)
IC3062
C3ABPG000063
SDRAM
LB3001
J0JHC0000045
VD
D+1.5V
FEP/SODC/VD/AD/CPU
D+3.3V
LB3002
J0JHC0000045
C3001
6.3V330P
C3002
6.3V330P
RA3001
(1K x 2)
RA3002
(82 x 4)
MDQ(5)
MDQ(10)
MDQ(4)
MDQ(11)
RA3003
(82 x 4)
MDQ(3)
MDQ(12)
MDQ(2)
MDQ(13)
MDQ(1)
MDQ(14)
MDQ(0)
MDQ(15)
RA3004
(82 x 4)
FEP/SODC/AD/CPU NRST
CPU AV1IRQ
CPU AV2IRQ
CPU/SODC WAIT
CPU NWEH
CPU/SODC NWEL
CPU/SODC NRD
CPU NAVCS
CPU SYSCLK
CPU/SODC CPUADR (1)
CPU/SODC CPUADR (2)
CPU/SODC CPUADR (3)
CPU/SODC CPUADR (4)
CPU/SODC CPUADR (5)
CPU/SODC CPUADR (6)
CPU/SODC CPUADR (7)
CPU/SODC CPUADR (8)
CPU/SODC CPUADR (9)
CPU/SODC CPUADR (10)
CPU/SODC CPUADR (11)
CPU/SODC CPUADR (12)
CPU/SODC CPUADR (13)
CPU/SODC CPUADR (14)
CPU/SODC CPUADR (15)
CPU/SODC CPUADR (16)
C3067 0.1
C3066 0.1
C3065 0.1
C3064 0.1
C3063 0.1
C3062 0.1
C3061 0.1
IC3061
MDQ(0)
MDQ(1)
MDQ(2)
MDQ(3)
MDQ(4)
MDQ(5)
MDQ(6)
MDQ(7)
MDQ(15)
MDQ(14)
MDQ(13)
MDQ(12)
MDQ(11)
MDQ(10)
MDQ(9)
MDQ(8)
DQM0
XWE
XCAS
XRAS
XCSM
BA0
BA1
MA(10)
MA(0)
MA(1)
MA(2)
MA(3)
DQM1
MA(11)
MA(9)
MA(8)
MA(7)
MA(6)
MA(5)
MA(4)
IC3061
C3ABPG000063
SDRAM
CPU/SODC CPUADR(17)
CPU/SODC CPUDT(0)
CPU/SODC CPUDT(1)
CPU/SODC CPUDT(2)
CPU/SODC CPUDT(3)
CPU/SODC CPUDT(4)
CPU/SODC CPUDT(5)
CPU/SODC CPUDT(6)
CPU/SODC CPUDT(7)
CPU CPUDT(8)
CPU CPUDT(9)
CPU CPUDT(10)
CPU CPUDT(11)
CPU CPUDT(12)
CPU CPUDT(13)
CPU CPUDT(14)
CPU CPUDT(15)

SCHEMATIC DIAGRAM-8

B DVD MODULE (2) (AVDEC) CIRCUIT

▨ : CD-DA SIGNAL LINE
—— : +B SIGNAL LINE
▨ : DVD AUDIO SIGNAL



IC3001
MN6775511
AV DECODER
RA3012 (82 x 4)
RA3013 (22 x 2)
RA3011 (82 x 4)
R3001 22
RA3010 (82 x 4)
RA3009 (82 x 4)
RA3008 (82 x 4)
RA3007 (82 x 4)
RA3006 (82 x 4)
MDQ(9)
MDQ(6)
MDQ(8)
MDQ(7)
DQM1
DQM0
XCAS
XRAS
XCSM
BA1
BA0
XWE
MA(9)
MA(11)
MA(8)
MA(10)
MA(7)
MA(0)
MA(6)
MA(1)
MA(5)
MA(2)
MA(4)
MA(3)
DQM2
DQM3
MDQ(16)
MDQ(31)
MDQ(17)
MDQ(30)
MDQ(18)
MDQ(29)
MDQ(19)
MDQ(28)
MDQ(20)
MDQ(27)
MDQ(21)
MDQ(26)
C3036 0.1
C3035 0.1
C3034 0.1
C3033 0.1
C3032 0.1
C3031 0.1
C3030 0.1
C3029 0.1
C3028 0.1
C3027 0.1
C3026 0.1
C3025 0.1
C3024 0.1
C3021 1
C3019 1
C3018 0.1
C3038 0.1
C3003 0.1
C3004 0.1
C3005 0.1
K3002 0
C3006 0.1
C3007 0.1
C3008 0.1
C3009 0.1
C3010 0.1
C3011 0.1
C3012 0.1
C3013 0.1
C3014 0.1
C3015 0.1
C3016 0.1
C3017 0.1
R3010 100
1 VSS
2 MDQ9
3 MDQ5
4 MDQ10
5 VDD
6 MDQ4
7 MDQ11
8 MDQ3
9 MDQ12
10 VSS
11 MDQ2
12 LVDD
13 MDQ13
14 MDQ1
15 VDD
16 MDQ14
17 MDQ0
18 MDQ15
19 VSS
20 HMD
21 XRST
22 XHINT
23 XHINT2
24 XDK
25 XWRH
26 VDD
27 XWR
28 XRD
29 XCS
30 LVDD
31 HCLK
32 HA1
33 HA2
34 VSS
35 HA3
36 HA4
37 HA5
38 HA6
39 VDD
40 HA7
41 HA8
42 HA9
43 HA10
44 VSS
45 HA11
46 HA12
47 HA13
48 LVDD
49 HA14
50 HA15
51 HA16
52 VDD
53 VSS
54 HA17
55 HD0
56 HD1
57 HD2
58 VDD
59 HD3
60 HD4
61 HD5
62 VSS
63 HD6
64 HD7
65 HD8
66 VDD
67 HD9
68 HD10
69 LVDD
70 HD11
71 VSS
72 HD12
73 HD13
74 HD14
75 VDD
76 HD15
77 DVALID
78 DSTR
79 STRQ
80 VSS
81 STD7
82 STD6
83 STD5
84 STD4
85 STD3
86 STD2
87 STD1
88 STD0
89 VDD
90 IECOUT
91 ADOUT0
92 ADOUT1
93 ADOUT2
94 ADOUT3
95 VSS
96 SRCK
97 LRCK
98 LVDD
99 PHCOMPO
100 EXTCK
101 CLK121
102 PCLK
103 VDD
104 VSS
105 AVDD
106 TCPOUT
107 PL LVSS
108 DAC3OUT
109 DAC1OUT
110 COMP2
111 IREF2
112 AVDD
113 AVSS
114 DAC2OUT
115 VRFF
116 DAC4OUT
117 COMP1
118 AVDD
119 IREF1
120 DAC5OUT
121 AVSS
122 VSS
123 DCTEST
124 TESTSEL2
125 TESTSEL1
126 TESTSEL0
127 LVDD
128 VCLK
129 VDIN7
130 VDIN6
131 VDD
132 VDIN5
133 VDIN4
134 VDIN3
135 LVDD
136 VDIN2
137 VDIN1/XVSYNC0
138 VDIN0/XHSYNC0
139 VSS
140 VDOUT0
141 VDOUT1
142 VDOUT2
143 VDOUT3
144 VDD
145 VDOUT4
146 VDOUT5
147 VDOUT6
148 VSS
149 VDOUT7
150 MDQ24
151 MDQ23
152 VDD
153 MDQ25
154 MDQ22
155 MDQ26
156 VSS
157 VDD
158 MDQ21
159 MDQ27
160 MDQ20
161 VSS
162 MDQ28
163 MDQ19
164 MDQ29
165 VDD
166 MDQ18
167 MDQ30
168 MDQ17
169 MDQ31
170 VSS
171 MDQ16
172 LVDD
173 DQM3
174 DQM2
175 VDD
176 MA3
177 MA4
178 MA2
179 MA5
180 VSS
181 MA1
182 MA6
183 MA0
184 VDD
185 MCKI
186 LVDD
187 MCK
188 MA7
189 MA10
190 VSS
191 MA8
192 MA11
193 XWE
194 VDD
195 BA0
196 MA9
197 BA1
198 XCSM
199 VSS
200 XRAS
201 XCAS
202 DQM0
203 VDD
204 DQM1
205 MDQ7
206 MDQ8
207 MDQ6
208 VSS
STD0 (SODC)
STD1 (SODC)
STD2 (SODC)
STD3 (SODC)
STD4 (SODC)
STD5 (SODC)
STD6 (SODC)
STD7 (SODC)
STENABLE (SODC)
STCLK (SODC)
STVALID (SODC)

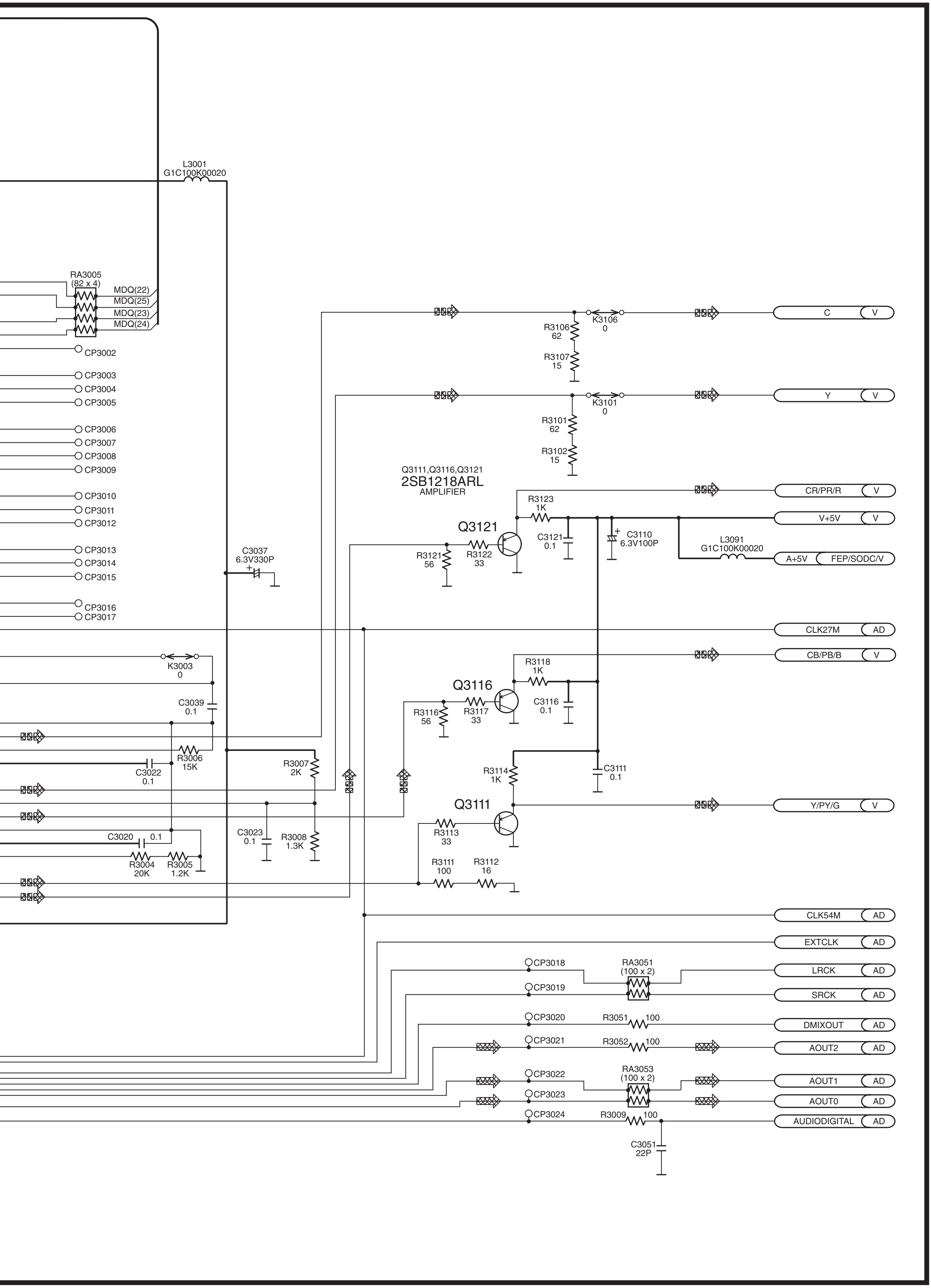
SCHEMATIC DIAGRAM-9

B DVD MODULE (2) (AVDEC) CIRCUIT

—— : +B SIGNAL LINE

: DVD VIDEO SIGNAL

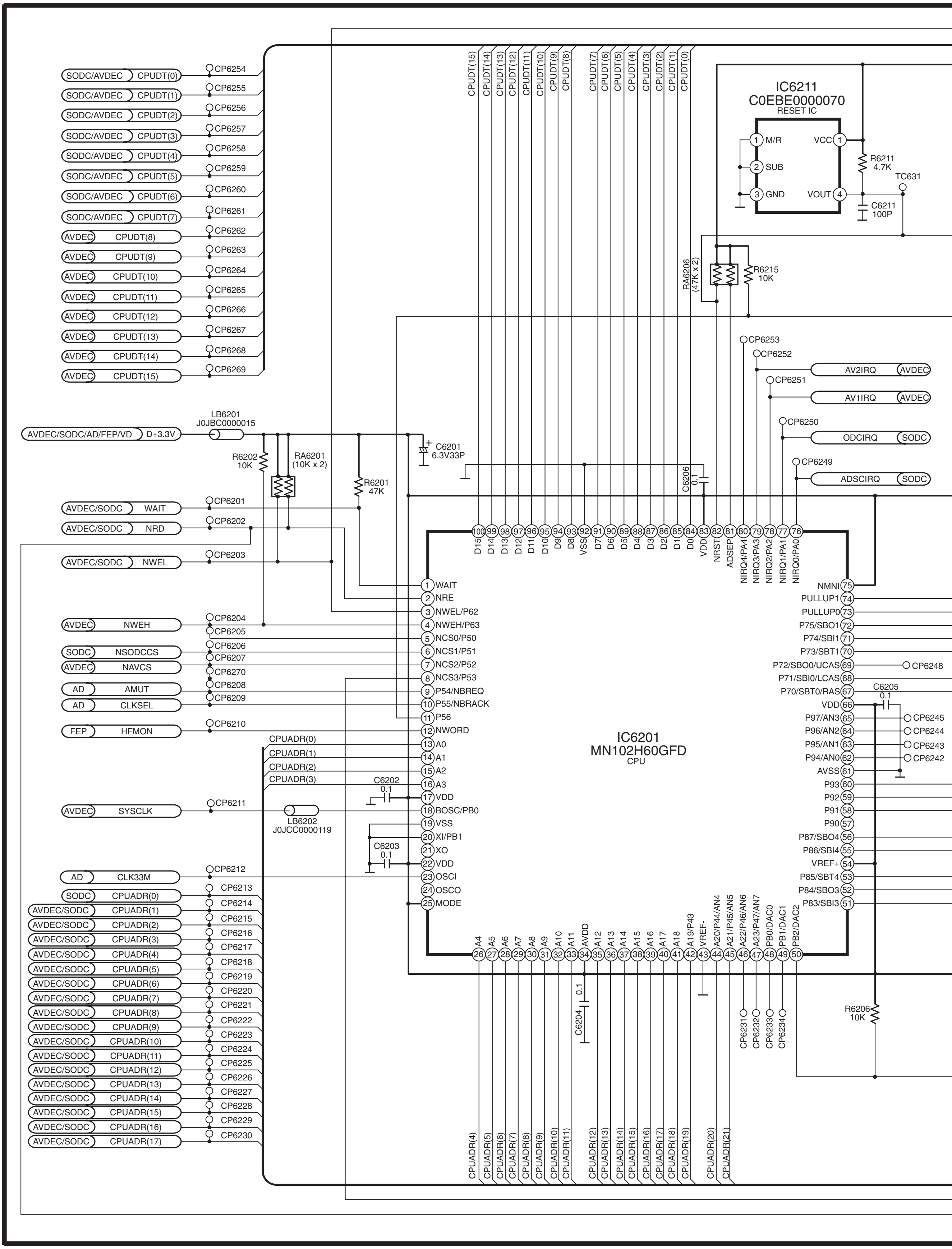
: DVD AUDIO SIGNAL


L3001
G1C100K00020
RA3005
(82 x 4)
MDQ(22)
MDQ(25)
MDQ(23)
MDQ(24)
CP3002
CP3003
CP3004
CP3005
CP3006
CP3007
CP3008
CP3009
CP3010
CP3011
CP3012
CP3013
CP3014
CP3015
CP3016
CP3017
C3037
6.3V330P
K3003
0
C3039
0.1
R3006
15K
C3022
0.1
R3007
2K
C3023
0.1
R3008
1.3K
C3020
0.1
R3004
20K
R3005
1.2K
R3106
62
K3106
0
R3107
15
C
V
R3101
62
K3101
0
R3102
15
Y
V
Q3111,Q3116,Q3121
2SB1218ARL
AMPLIFIER
R3123
1K
Q3121
C3121
0.1
C3110
6.3V100P
L3091
G1C100K00020
R3121
56
R3122
33
CR/PR/R
V
V+5V
V
A+5V
FEP/SODC/V
CLK27M
AD
R3118
1K
CB/PB/B
V
Q3116
R3116
56
R3117
33
C3116
0.1
R3114
1K
C3111
0.1
Q3111
Y/PY/G
V
R3113
33
R3111
100
R3112
16
CLK54M
AD
EXTCLK
AD
CP3018
RA3051
(100 x 2)
LRCK
AD
CP3019
SRCK
AD
CP3020
R3051
100
DMIXOUT
AD
CP3021
R3052
100
AOUT2
AD
CP3022
RA3053
(100 x 2)
AOUT1
AD
CP3023
AOUT0
AD
CP3024
R3009
100
AUDIODIGITAL
AD
C3051
22P

SCHEMATIC DIAGRAM-10

B DVD MODULE (2) (CPU) CIRCUIT

: +B SIGNAL LINE

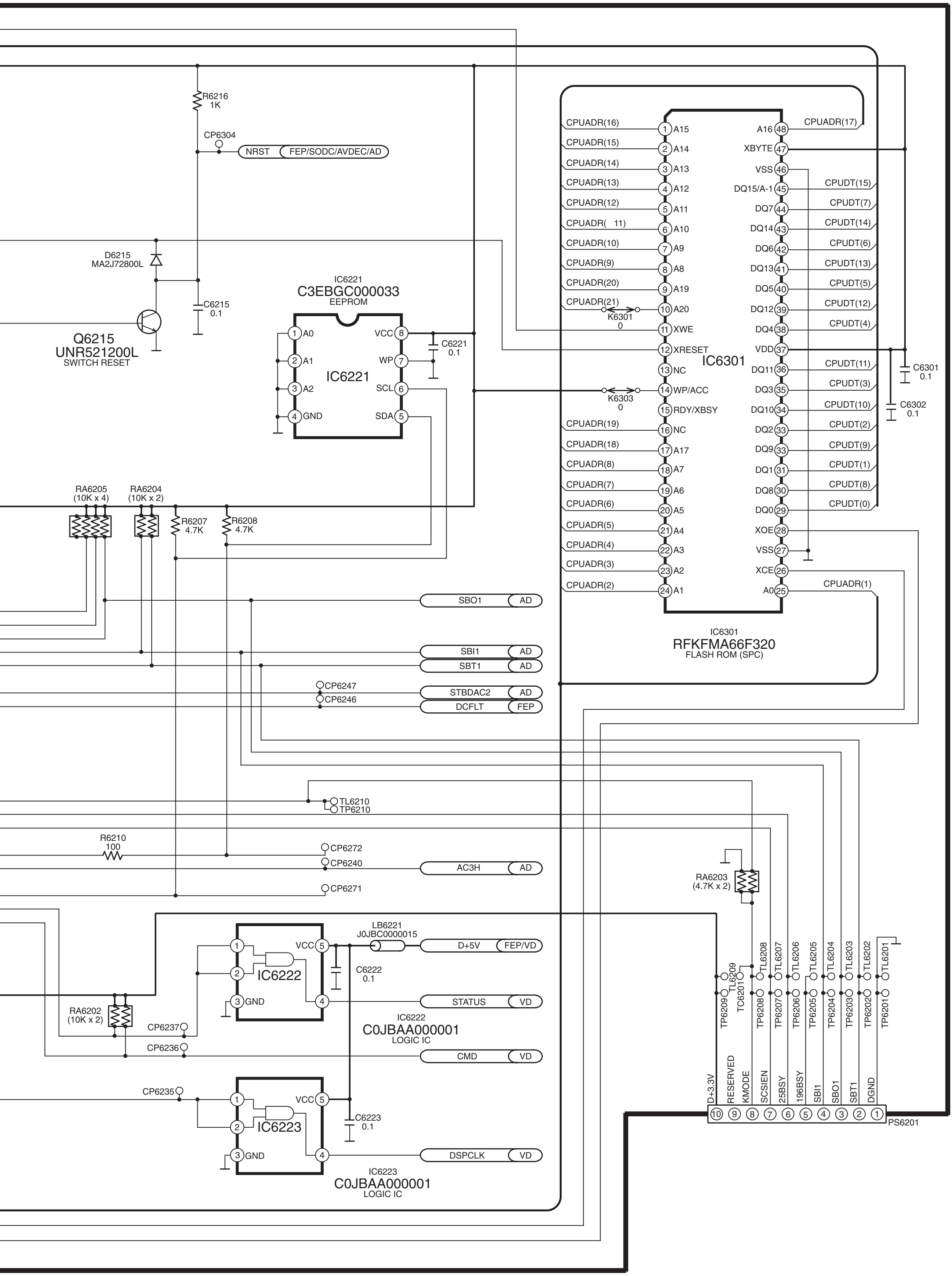


SODC/AVDEC CPUDT(0) CP6254
SODC/AVDEC CPUDT(1) CP6255
SODC/AVDEC CPUDT(2) CP6256
SODC/AVDEC CPUDT(3) CP6257
SODC/AVDEC CPUDT(4) CP6258
SODC/AVDEC CPUDT(5) CP6259
SODC/AVDEC CPUDT(6) CP6260
SODC/AVDEC CPUDT(7) CP6261
AVDEC CPUDT(8) CP6262
AVDEC CPUDT(9) CP6263
AVDEC CPUDT(10) CP6264
AVDEC CPUDT(11) CP6265
AVDEC CPUDT(12) CP6266
AVDEC CPUDT(13) CP6267
AVDEC CPUDT(14) CP6268
AVDEC CPUDT(15) CP6269
AVDEC/SODC/AD/FEP/VD D+3.3V
LB6201 J0JBC0000015
R6202 10K
RA6201 (10K x 2)
R6201 47K
C6201 6.3V33P
C6206 0.1
AVDEC/SODC WAIT CP6201
AVDEC/SODC NRD CP6202
AVDEC/SODC NWEL CP6203
AVDEC NWEH CP6204
CP6205
SODC NSODCCS CP6206
AVDEC NAVCS CP6207
CP6270
AD AMUT CP6208
AD CLKSEL CP6209
FEP HFMON CP6210
AVDEC SYSCLK CP6211
AD CLK33M CP6212
SODC CPUADR(0) CP6213
AVDEC/SODC CPUADR(1) CP6214
AVDEC/SODC CPUADR(2) CP6215
AVDEC/SODC CPUADR(3) CP6216
AVDEC/SODC CPUADR(4) CP6217
AVDEC/SODC CPUADR(5) CP6218
AVDEC/SODC CPUADR(6) CP6219
AVDEC/SODC CPUADR(7) CP6220
AVDEC/SODC CPUADR(8) CP6221
AVDEC/SODC CPUADR(9) CP6222
AVDEC/SODC CPUADR(10) CP6223
AVDEC/SODC CPUADR(11) CP6224
AVDEC/SODC CPUADR(12) CP6225
AVDEC/SODC CPUADR(13) CP6226
AVDEC/SODC CPUADR(14) CP6227
AVDEC/SODC CPUADR(15) CP6228
AVDEC/SODC CPUADR(16) CP6229
AVDEC/SODC CPUADR(17) CP6230
CPUADR(0)
CPUADR(1)
CPUADR(2)
CPUADR(3)
C6202 0.1
LB6202 J0JCC0000119
C6203 0.1
CPUDT(15) CPUDT(14) CPUDT(13) CPUDT(12) CPUDT(11) CPUDT(10) CPUDT(9) CPUDT(8) CPUDT(7) CPUDT(6) CPUDT(5) CPUDT(4) CPUDT(3) CPUDT(2) CPUDT(1) CPUDT(0)
IC6211 C0EBE0000070 RESET IC
1 M/R
2 SUB
3 GND
VCC 1
VOUT 4
R6211 4.7K
TC631
C6211 100P
RA6206 (47K x 2)
R6215 10K
CP6253
CP6252
AV2IRQ AVDEC
CP6251
AV1IRQ AVDEC
CP6250
ODCIRQ SODC
CP6249
ADSCIRQ SODC
IC6201 MN102H60GFD CPU
100 D15
99 D14
98 D13
97 D12
96 D11
95 D10
94 D9
93 D8
92 VSS
91 D7
90 D6
89 D5
88 D4
87 D3
86 D2
85 D1
84 D0
83 VDD
82 NRST
81 ADSEP
80 NIRQ4/PA4
79 NIRQ3/PA3
78 NIRQ2/PA2
77 NIRQ1/PA1
76 NIRQ0/PA0
1 WAIT
2 NRE
3 NWEL/P62
4 NWEH/P63
5 NCS0/P50
6 NCS1/P51
7 NCS2/P52
8 NCS3/P53
9 P54/NBREQ
10 P55/NBRACK
11 P56
12 NWORD
13 A0
14 A1
15 A2
16 A3
17 VDD
18 BOSC/PB0
19 VSS
20 XI/PB1
21 XO
22 VDD
23 OSCI
24 OSCO
25 MODE
NMNI 75
PULLUP1 74
PULLUP0 73
P75/SBO1 72
P74/SBI1 71
P73/SBT1 70
P72/SBO0/UCAS 69 CP6248
P71/SBI0/LCAS 68
P70/SBT0/RAS 67
VDD 66 C6205 0.1
P97/AN3 65 CP6245
P96/AN2 64 CP6244
P95/AN1 63 CP6243
P94/AN0 62 CP6242
AVSS 61
P93 60
P92 59
P91 58
P90 57
P87/SBO4 56
P86/SBI4 55
VREF+ 54
P85/SBT4 53
P84/SBO3 52
P83/SBI3 51
26 A4
27 A5
28 A6
29 A7
30 A8
31 A9
32 A10
33 A11
34 AVDD
35 A12
36 A13
37 A14
38 A15
39 A16
40 A17
41 A18
42 A19/P43
43 VREF-
44 A20/P44/AN4
45 A21/P45/AN5
46 A22/P46/AN6
47 A23/P47/AN7
48 PB0/DAC0
49 PB1/DAC1
50 PB2/DAC2
C6204 0.1
CP6231 CP6232 CP6233 CP6234
R6206 10K
CPUADR(4) CPUADR(5) CPUADR(6) CPUADR(7) CPUADR(8) CPUADR(9) CPUADR(10) CPUADR(11) CPUADR(12) CPUADR(13) CPUADR(14) CPUADR(15) CPUADR(16) CPUADR(17) CPUADR(18) CPUADR(19) CPUADR(20) CPUADR(21)

SCHEMATIC DIAGRAM-11

B DVD MODULE (2) (CPU) CIRCUIT

: +B SIGNAL LINE


R6216
1K
CP6304
NRST
FEP/SODC/AVDEC/AD
D6215
MA2J72800L
C6215
0.1
Q6215
UNR521200L
SWITCH RESET
IC6221
C3EBGC000033
EEPROM
1 A0
2 A1
3 A2
4 GND
VCC 8
WP 7
SCL 6
SDA 5
IC6221
C6221
0.1
RA6205
(10K x 4)
RA6204
(10K x 2)
R6207
4.7K
R6208
4.7K
SBO1
AD
SBI1
AD
SBT1
AD
CP6247
CP6246
STBDAC2
AD
DCFLT
FEP
TL6210
TP6210
R6210
100
CP6272
CP6240
AC3H
AD
CP6271
IC6301
CPUADR(16)
CPUADR(15)
CPUADR(14)
CPUADR(13)
CPUADR(12)
CPUADR(11)
CPUADR(10)
CPUADR(9)
CPUADR(20)
CPUADR(21)
K6301
0
K6303
0
CPUADR(19)
CPUADR(18)
CPUADR(8)
CPUADR(7)
CPUADR(6)
CPUADR(5)
CPUADR(4)
CPUADR(3)
CPUADR(2)
1 A15
2 A14
3 A13
4 A12
5 A11
6 A10
7 A9
8 A8
9 A19
10 A20
11 XWE
12 XRESET
13 NC
14 WP/ACC
15 RDY/XBSY
16 NC
17 A17
18 A7
19 A6
20 A5
21 A4
22 A3
23 A2
24 A1
A16 48
XBYTE 47
VSS 46
DQ15/A-1 45
DQ7 44
DQ14 43
DQ6 42
DQ13 41
DQ5 40
DQ12 39
DQ4 38
VDD 37
DQ11 36
DQ3 35
DQ10 34
DQ2 33
DQ9 33
DQ1 31
DQ8 30
DQ0 29
XOE 28
VSS 27
XCE 26
A0 25
CPUADR(17)
CPUDT(15)
CPUDT(7)
CPUDT(14)
CPUDT(6)
CPUDT(13)
CPUDT(5)
CPUDT(12)
CPUDT(4)
CPUDT(11)
CPUDT(3)
CPUDT(10)
CPUDT(2)
CPUDT(9)
CPUDT(1)
CPUDT(8)
CPUDT(0)
CPUADR(1)
C6301
0.1
C6302
0.1
IC6301
RFKFMA66F320
FLASH ROM (SPC)
RA6203
(4.7K x 2)
LB6221
J0JBC0000015
D+5V
FEP/VD
1
2
3 GND
VCC 5
4
IC6222
C6222
0.1
STATUS
VD
RA6202
(10K x 2)
CP6237
CP6236
IC6222
C0JBAA000001
LOGIC IC
CMD
VD
CP6235
IC6223
C6223
0.1
DSPCLK
VD
IC6223
C0JBAA000001
LOGIC IC
TP6209
TL6209
TC6201
TL6208
TP6208
TL6207
TP6207
TL6206
TP6206
TL6205
TP6205
TL6204
TP6204
TL6203
TP6203
TL6202
TP6202
TL6201
TP6201
D+3.3V
RESERVED
KMODE
SCSIEN
25BSY
196BSY
SBI1
SBO1
SBT1
DGND
10 9 8 7 6 5 4 3 2 1
PS6201

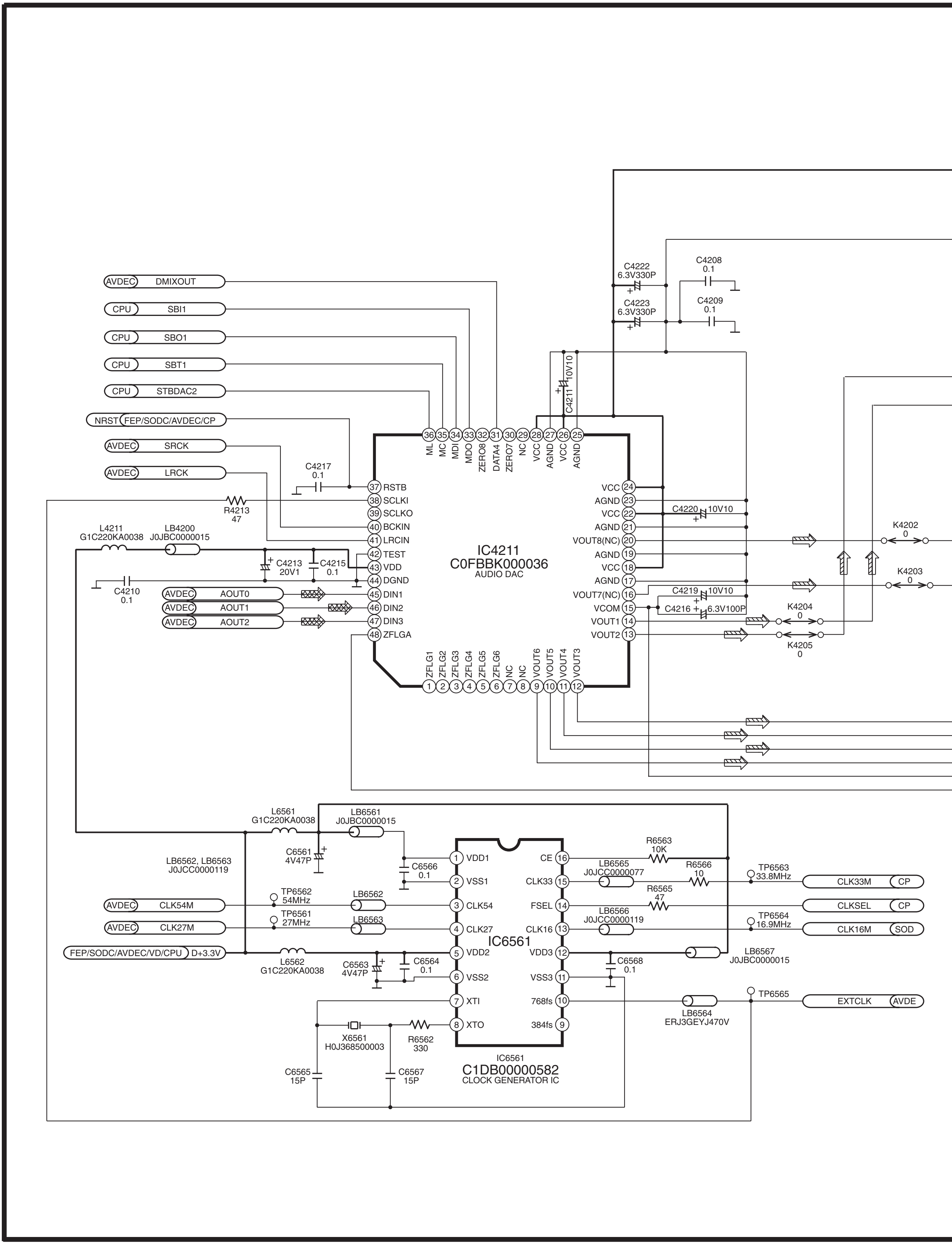
SCHEMATIC DIAGRAM-12

B DVD MODULE (2) (AUDIO DAC) CIRCUIT

: +B SIGNAL LINE

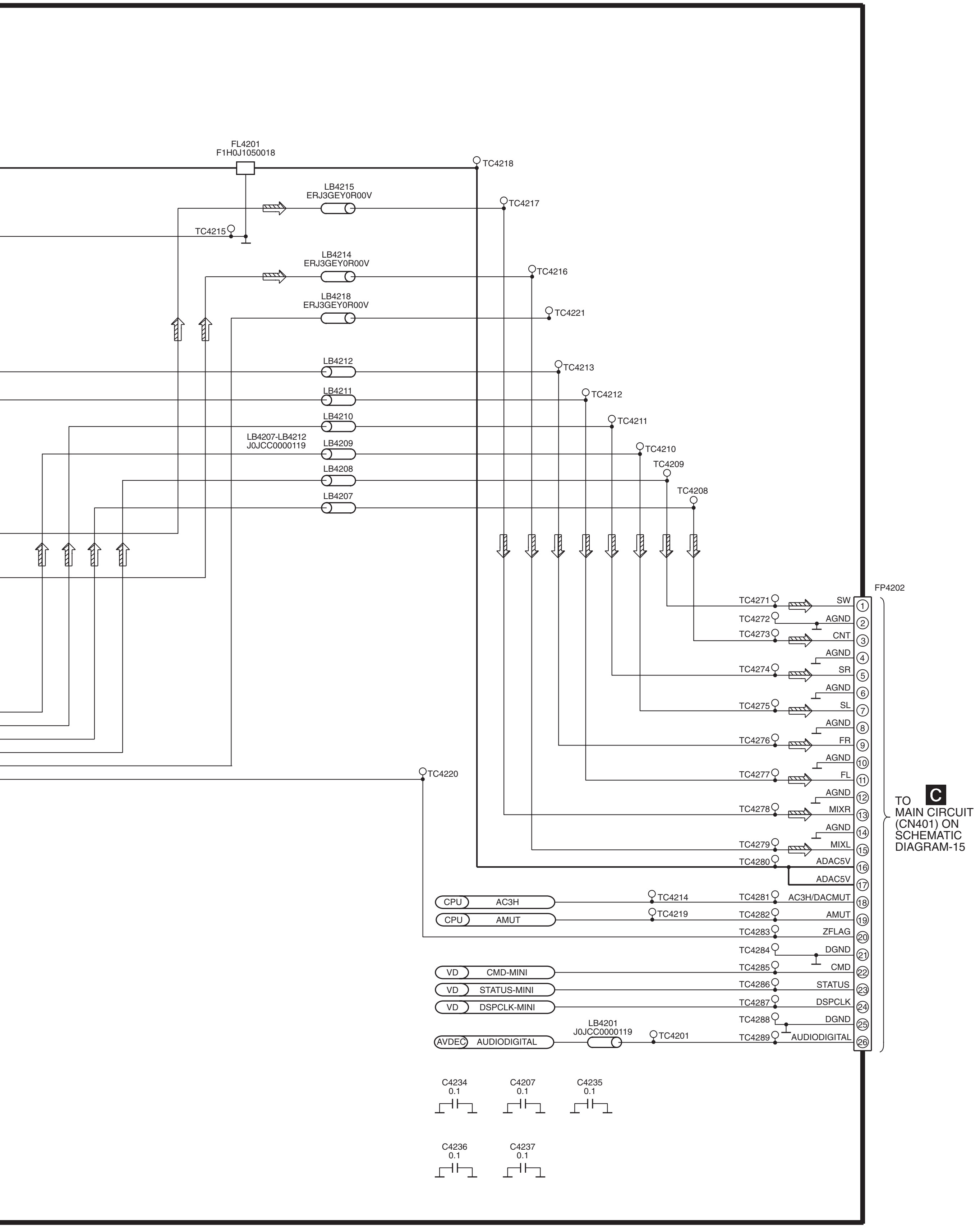
: MAIN SIGNAL LINE

: DVD AUDIO SIGNAL LINE


AVDEC DMIXOUT
CPU SBI1
CPU SBO1
CPU SBT1
CPU STBDAC2
NRST FEP/SODC/AVDEC/CP
AVDEC SRCK
AVDEC LRCK
C4217 0.1
R4213 47
L4211 G1C220KA0038
LB4200 J0JBC0000015
C4213 20V1
C4215 0.1
C4210 0.1
AVDEC AOUT0
AVDEC AOUT1
AVDEC AOUT2
C4222 6.3V330P
C4223 6.3V330P
C4208 0.1
C4209 0.1
C4211 10V10
C4220 10V10
C4219 10V10
C4216 6.3V100P
K4202 0
K4203 0
K4204 0
K4205 0
36 ML
35 MC
34 MDI
33 MDO
32 ZERO8
31 DATA4
30 ZERO7
29 NC
28 VCC
27 AGND
26 VCC
25 AGND
37 RSTB
38 SCLKI
39 SCLKO
40 BCKIN
41 LRCIN
42 TEST
43 VDD
44 DGND
45 DIN1
46 DIN2
47 DIN3
48 ZFLGA
24 VCC
23 AGND
22 VCC
21 AGND
20 VOUT8(NC)
19 AGND
18 VCC
17 AGND
16 VOUT7(NC)
15 VCOM
14 VOUT1
13 VOUT2
1 ZFLG1
2 ZFLG2
3 ZFLG3
4 ZFLG4
5 ZFLG5
6 ZFLG6
7 NC
8 NC
9 VOUT6
10 VOUT5
11 VOUT4
12 VOUT3
IC4211
C0FBBK000036
AUDIO DAC
L6561 G1C220KA0038
LB6561 J0JBC0000015
C6561 4V47P
C6566 0.1
LB6562, LB6563 J0JCC0000119
AVDEC CLK54M
AVDEC CLK27M
TP6562 54MHz
TP6561 27MHz
LB6562
LB6563
FEP/SODC/AVDEC/VD/CPU D+3.3V
L6562 G1C220KA0038
C6563 4V47P
C6564 0.1
X6561 H0J368500003
R6562 330
C6565 15P
C6567 15P
1 VDD1
2 VSS1
3 CLK54
4 CLK27
5 VDD2
6 VSS2
7 XTI
8 XTO
16 CE
15 CLK33
14 FSEL
13 CLK16
12 VDD3
11 VSS3
10 768fs
9 384fs
IC6561
IC6561
C1DB00000582
CLOCK GENERATOR IC
R6563 10K
LB6565 J0JCC0000077
R6566 10
R6565 47
LB6566 J0JCC0000119
C6568 0.1
LB6567 J0JBC0000015
LB6564 ERJ3GEYJ470V
TP6563 33.8MHz
TP6564 16.9MHz
TP6565
CLK33M CP
CLKSEL CP
CLK16M SOD
EXTCLK AVDE

B DVD MODULE (2) (AUDIO DAC) CIRCUIT

: +B SIGNAL LINE
: MAIN SIGNAL LINE


FL4201
F1H0J1050018
TC4218
LB4215
ERJ3GEY0R00V
TC4217
TC4215
LB4214
ERJ3GEY0R00V
TC4216
LB4218
ERJ3GEY0R00V
TC4221
LB4212
TC4213
LB4211
TC4212
LB4210
TC4211
LB4207-LB4212
J0JCC0000119
LB4209
TC4210
TC4209
LB4208
TC4208
LB4207
FP4202
TC4271
SW
TC4272
AGND
TC4273
CNT
AGND
TC4274
SR
AGND
TC4275
SL
AGND
TC4276
FR
AGND
TC4277
FL
AGND
TC4278
MIXR
AGND
TC4279
MIXL
TC4280
ADAC5V
ADAC5V
TC4220
CPU
AC3H
TC4214
TC4281
AC3H/DACMUT
CPU
AMUT
TC4219
TC4282
AMUT
TC4283
ZFLAG
TC4284
DGND
VD
CMD-MINI
TC4285
CMD
VD
STATUS-MINI
TC4286
STATUS
VD
DSPCLK-MINI
TC4287
DSPCLK
TC4288
DGND
AVDEC
AUDIODIGITAL
LB4201
J0JCC0000119
TC4201
TC4289
AUDIODIGITAL
①
②
③
④
⑤
⑥
⑦
⑧
⑨
⑩
⑪
⑫
⑬
⑭
⑮
⑯
⑰
⑱
⑲
⑳
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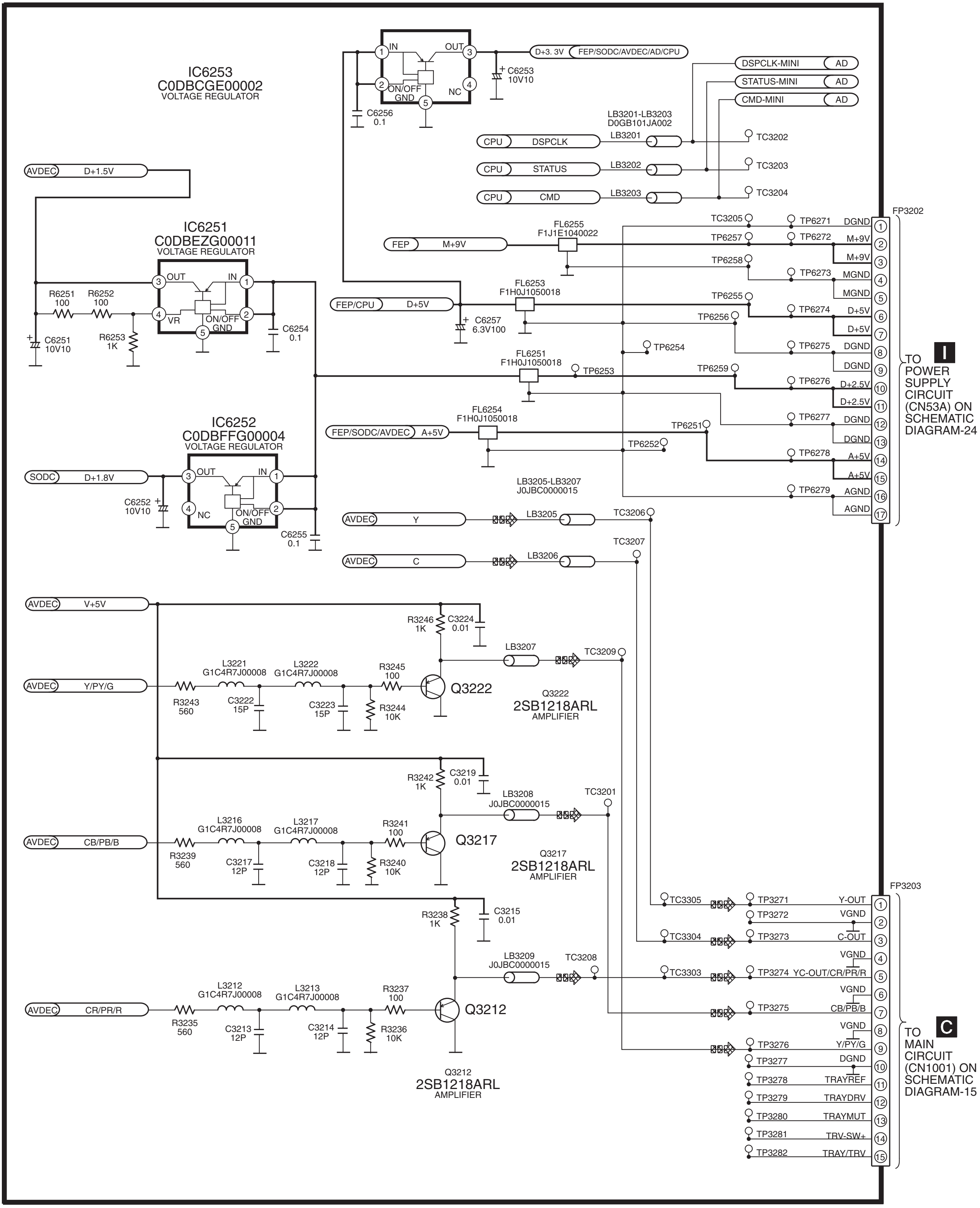
㉖
TO C
MAIN CIRCUIT
(CN401) ON
SCHEMATIC
DIAGRAM-15
C4234
0.1
C4207
0.1
C4235
0.1
C4236
0.1
C4237
0.1

SCHEMATIC DIAGRAM-14

B DVD MODULE (2) (VIDEO DAC) CIRCUIT

——— : +B SIGNAL LINE

▨▨▨⇨ : DVD VIDEO SIGNAL LINE

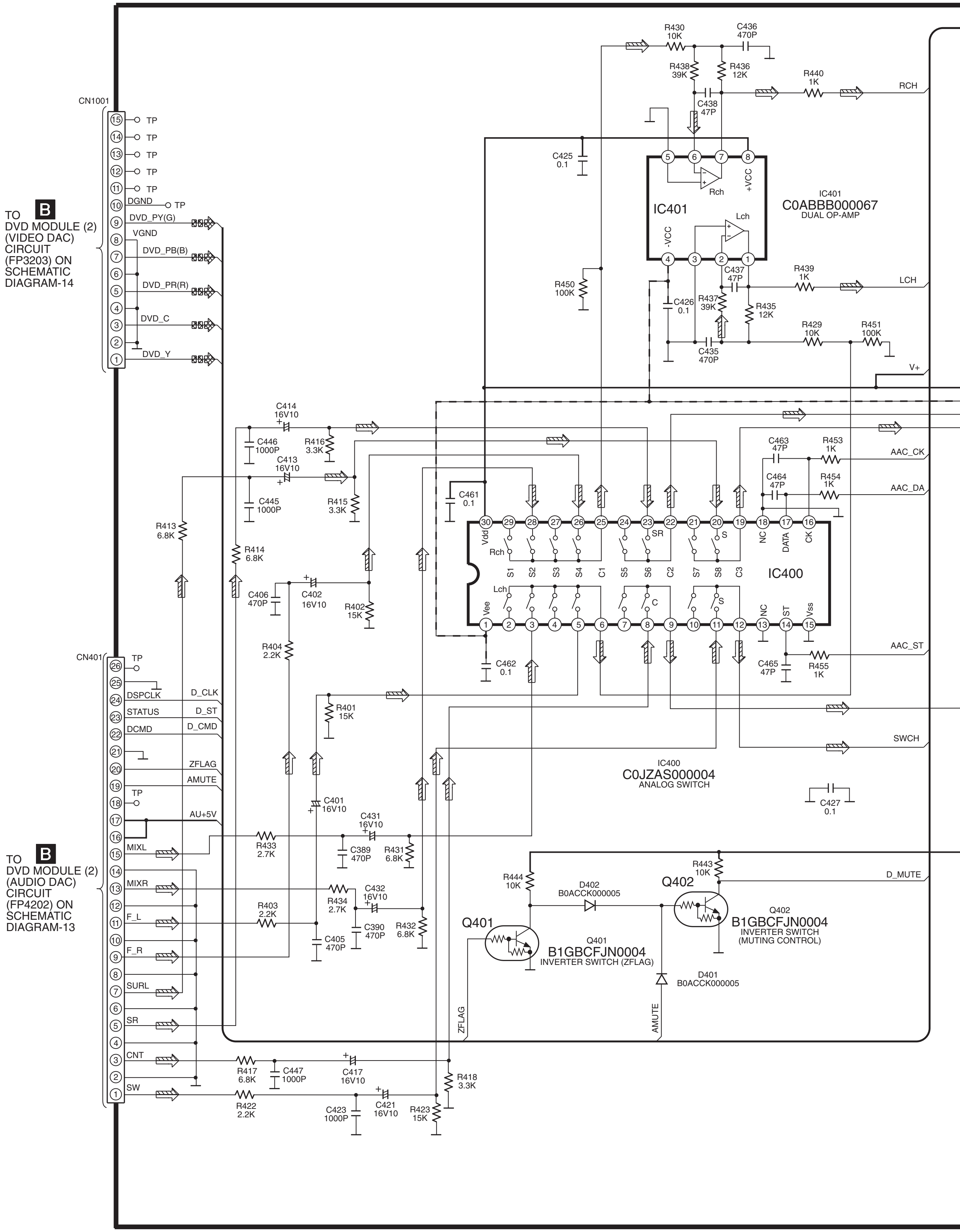

IC6253
C0DBCGE00002
VOLTAGE REGULATOR
IN
OUT
ON/OFF
GND
NC
D+3. 3V
FEP/SODC/AVDEC/AD/CPU
C6253
10V10
C6256
0.1
DSPCLK-MINI
STATUS-MINI
CMD-MINI
AD
LB3201-LB3203
D0GB101JA002
CPU
DSPCLK
STATUS
CMD
LB3201
LB3202
LB3203
TC3202
TC3203
TC3204
AVDEC
D+1.5V
IC6251
C0DBEZG00011
VOLTAGE REGULATOR
VR
R6251
100
R6252
100
R6253
1K
C6251
10V10
C6254
0.1
FEP
M+9V
FL6255
F1J1E1040022
FEP/CPU
D+5V
FL6253
F1H0J1050018
C6257
6.3V100
FL6251
F1H0J1050018
FEP/SODC/AVDEC
A+5V
FL6254
F1H0J1050018
TC3205
TP6257
TP6258
TP6255
TP6256
TP6254
TP6253
TP6259
TP6251
TP6252
TP6271
TP6272
TP6273
TP6274
TP6275
TP6276
TP6277
TP6278
TP6279
DGND
M+9V
MGND
D+5V
D+2.5V
A+5V
AGND
FP3202
TO POWER SUPPLY CIRCUIT (CN53A) ON SCHEMATIC DIAGRAM-24
I
IC6252
C0DBFFG00004
VOLTAGE REGULATOR
SODC
D+1.8V
C6252
10V10
C6255
0.1
LB3205-LB3207
J0JBC0000015
Y
C
LB3205
LB3206
TC3206
TC3207
V+5V
R3246
1K
C3224
0.01
LB3207
TC3209
Y/PY/G
L3221
G1C4R7J00008
L3222
G1C4R7J00008
R3245
100
R3243
560
C3222
15P
C3223
15P
R3244
10K
Q3222
2SB1218ARL
AMPLIFIER
R3242
1K
C3219
0.01
LB3208
J0JBC0000015
TC3201
CB/PB/B
L3216
G1C4R7J00008
L3217
G1C4R7J00008
R3241
100
R3239
560
C3217
12P
C3218
12P
R3240
10K
Q3217
2SB1218ARL
AMPLIFIER
R3238
1K
C3215
0.01
LB3209
J0JBC0000015
TC3208
CR/PR/R
L3212
G1C4R7J00008
L3213
G1C4R7J00008
R3237
100
R3235
560
C3213
12P
C3214
12P
R3236
10K
Q3212
2SB1218ARL
AMPLIFIER
TC3305
TC3304
TC3303
TP3271
TP3272
TP3273
TP3274
TP3275
TP3276
TP3277
TP3278
TP3279
TP3280
TP3281
TP3282
Y-OUT
VGND
C-OUT
YC-OUT/CR/PR/R
CB/PB/B
Y/PY/G
DGND
TRAYREF
TRAYDRV
TRAYMUT
TRV-SW+
TRAY/TRV
FP3203
TO MAIN CIRCUIT (CN1001) ON SCHEMATIC DIAGRAM-15
C

SCHEMATIC DIAGRAM-15

Side A Side B

C MAIN CIRCUIT

- - - : -B SIGNAL LINE
—— : +B SIGNAL LINE
⇨ : DVD VIDEO SIGNAL LINE
⇨ : MAIN SIGNAL LINE

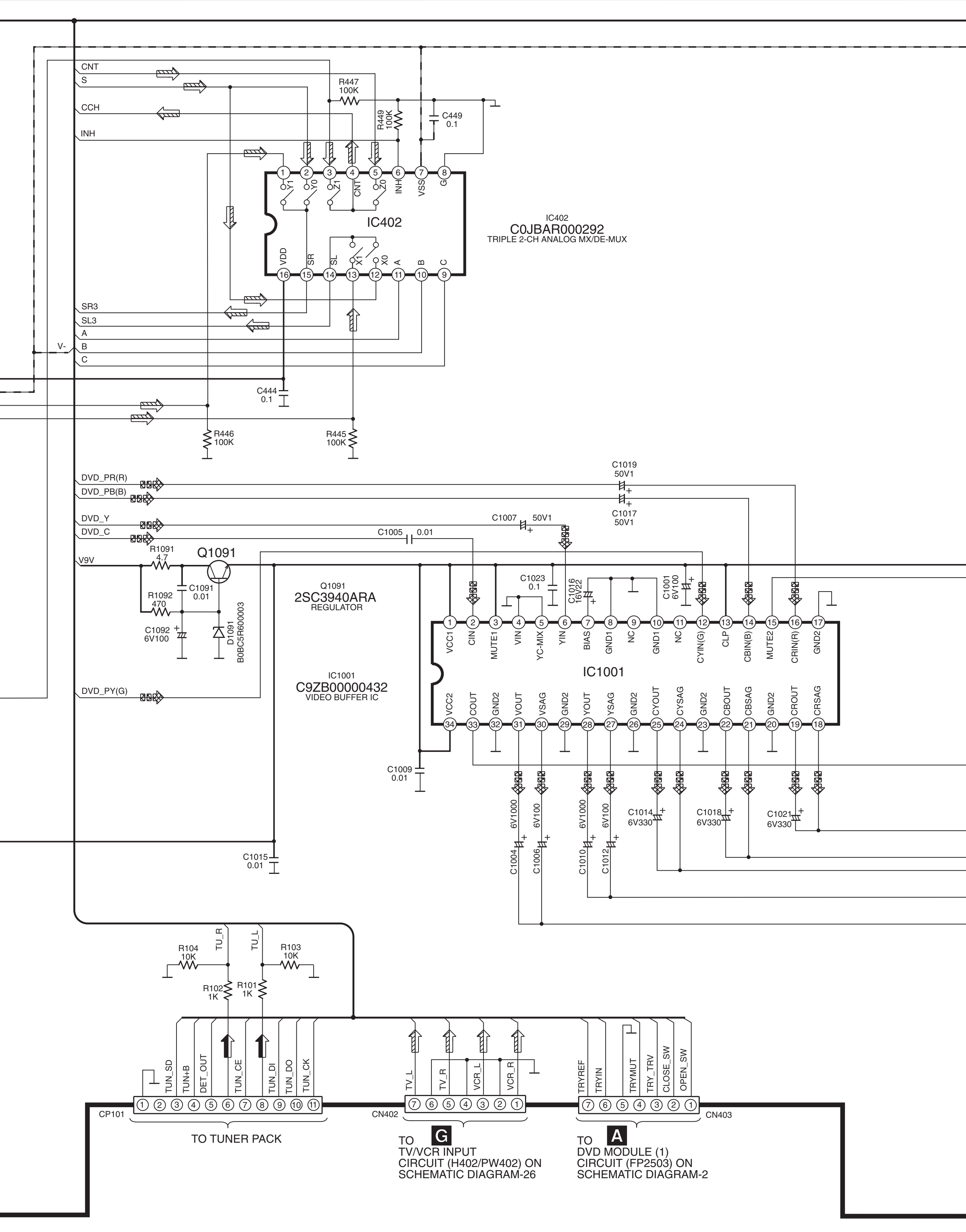


CN1001
TP
DGND
DVD_PY(G)
VGND
DVD_PB(B)
DVD_PR(R)
DVD_C
DVD_Y
TO B DVD MODULE (2) (VIDEO DAC) CIRCUIT (FP3203) ON SCHEMATIC DIAGRAM-14
R430 10K
C436 470P
R438 39K
R436 12K
R440 1K
RCH
C438 47P
C425 0.1
IC401
Rch
+VCC
-VCC
Lch
IC401 C0ABBB000067 DUAL OP-AMP
R450 100K
C426 0.1
C437 47P
R437 39K
R435 12K
R439 1K
LCH
C435 470P
R429 10K
R451 100K
V+
C414 16V10
C446 1000P
R416 3.3K
C413 16V10
C445 1000P
R415 3.3K
R413 6.8K
R414 6.8K
C461 0.1
C463 47P
R453 1K
AAC_CK
C464 47P
R454 1K
AAC_DA
Vdd
Rch
S1 S2 S3 S4 C1 S5 S6 C2 S7 S8 C3
SR
S
C
NC
DATA
CK
ST
Vss
Vee
Lch
IC400
C406 470P
C402 16V10
R402 15K
R404 2.2K
C462 0.1
C465 47P
R455 1K
AAC_ST
R401 15K
SWCH
IC400 C0JZAS000004 ANALOG SWITCH
C427 0.1
CN401
D_CLK
DSPCLK
STATUS
D_ST
DCMD
D_CMD
ZFLAG
AMUTE
AU+5V
MIXL
MIXR
F_L
F_R
SURL
SR
CNT
SW
TO B DVD MODULE (2) (AUDIO DAC) CIRCUIT (FP4202) ON SCHEMATIC DIAGRAM-13
C401 16V10
C431 16V10
R433 2.7K
C389 470P
R431 6.8K
R434 2.7K
C432 16V10
R403 2.2K
C390 470P
R432 6.8K
C405 470P
R444 10K
D402 B0ACCK000005
R443 10K
Q402
D_MUTE
Q402 B1GBCFJN0004 INVERTER SWITCH (MUTING CONTROL)
Q401
Q401 B1GBCFJN0004 INVERTER SWITCH (ZFLAG)
D401 B0ACCK000005
ZFLAG
AMUTE
R417 6.8K
C447 1000P
C417 16V10
R418 3.3K
R422 2.2K
C423 1000P
C421 16V10
R423 15K

SCHEMATIC DIAGRAM-16

C MAIN CIRCUIT

- - - : -B SIGNAL LINE
—— : +B SIGNAL LINE
▨⇨ : DVD VIDEO SIGNAL LINE
⇨ : MAIN SIGNAL LINE
➡ : FM/AM SIGNAL LINE



CNT
S
CCH
INH
R447
100K
R449
100K
C449
0.1
1 Y1
2 Y0
3 Z1
4 CNT
5 Z0
6 INH
7 VSS
8 G
IC402
16 VDD
15 SR
14 SL
13 X1
12 X0
11 A
10 B
9 C
IC402
C0JBAR000292
TRIPLE 2-CH ANALOG MX/DE-MUX
SR3
SL3
A
V-
B
C
C444
0.1
R446
100K
R445
100K
DVD_PR(R)
DVD_PB(B)
DVD_Y
DVD_C
V9V
C1019
50V1
C1017
50V1
C1007
50V1
C1005
0.01
R1091
4.7
Q1091
R1092
470
C1091
0.01
C1092
6V100
D1091
B0BC5R600003
Q1091
2SC3940ARA
REGULATOR
C1023
0.1
C1016
16V22
C1001
6V100
1 VCC1
2 CIN
3 MUTE1
4 VIN
5 YC-MIX
6 YIN
7 BIAS
8 GND1
9 NC
10 GND1
11 NC
12 CYIN(G)
13 CLP
14 CBIN(B)
15 MUTE2
16 CRIN(R)
17 GND2
IC1001
C9ZB00000432
VIDEO BUFFER IC
IC1001
DVD_PY(G)
34 VCC2
33 COUT
32 GND2
31 VOUT
30 VSAG
29 GND2
28 YOUT
27 YSAG
26 GND2
25 CYOUT
24 CYSAG
23 GND2
22 CBOUT
21 CBSAG
20 GND2
19 CROUT
18 CRSAG
C1009
0.01
C1015
0.01
6V1000
C1004
6V100
C1006
6V1000
C1010
6V100
C1012
C1014
6V330
C1018
6V330
C1021
6V330
TU_R
TU_L
R104
10K
R103
10K
R102
1K
R101
1K
TUN_SD
TUN+B
DET_OUT
TUN_CE
TUN_DI
TUN_DO
TUN_CK
CP101
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪
TO TUNER PACK
TV_L
TV_R
VCR_L
VCR_R
CN402
⑦ ⑥ ⑤ ④ ③ ② ①
TO G
TV/VCR INPUT
CIRCUIT (H402/PW402) ON
SCHEMATIC DIAGRAM-26
TRYREF
TRYIN
TRYMUT
TRY_TRV
CLOSE_SW
OPEN_SW
⑦ ⑥ ⑤ ④ ③ ② ①
CN403
TO A
DVD MODULE (1)
CIRCUIT (FP2503) ON
SCHEMATIC DIAGRAM-2

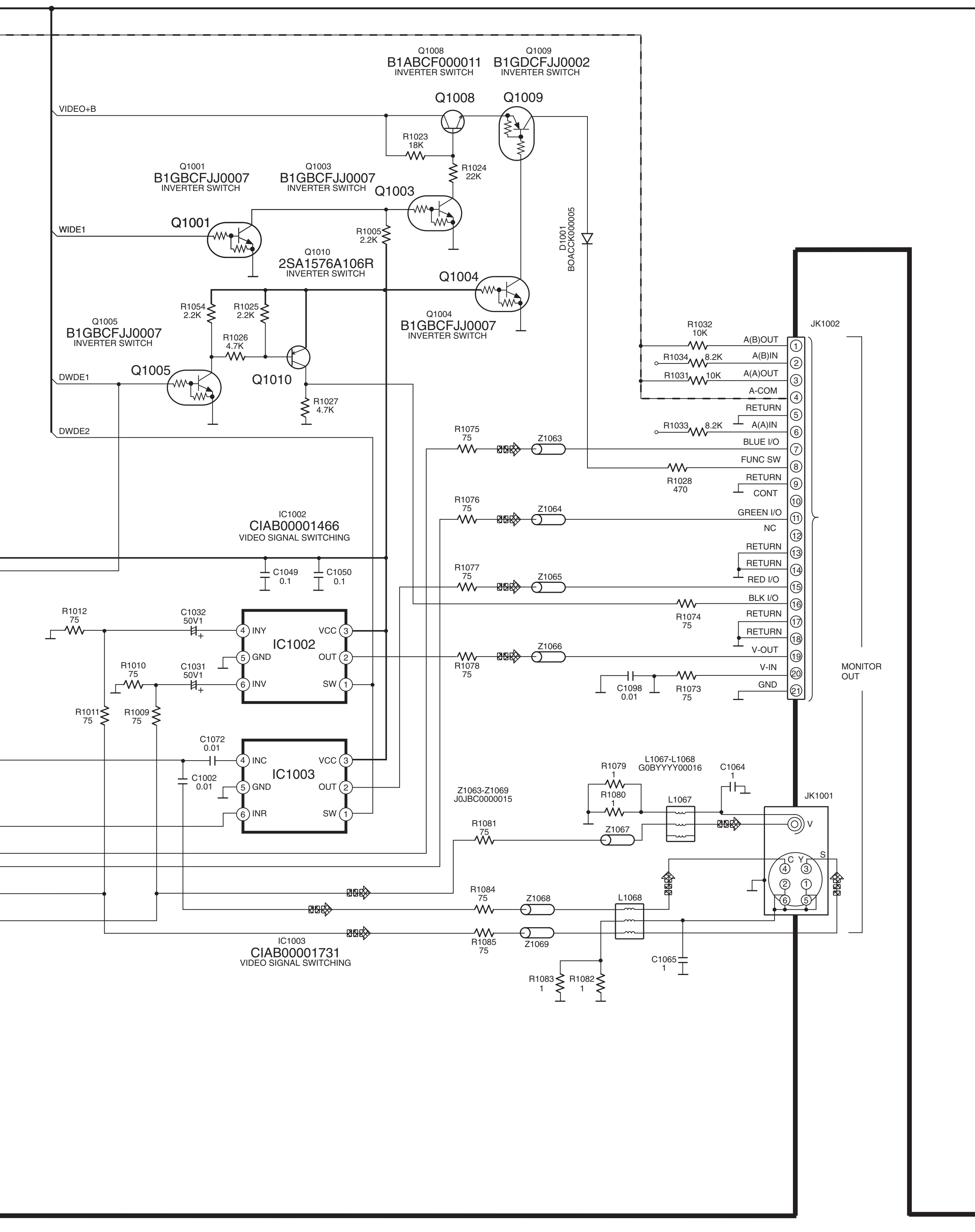
SCHEMATIC DIAGRAM-17

C MAIN CIRCUIT

- - - : -B SIGNAL LINE

—— : +B SIGNAL LINE

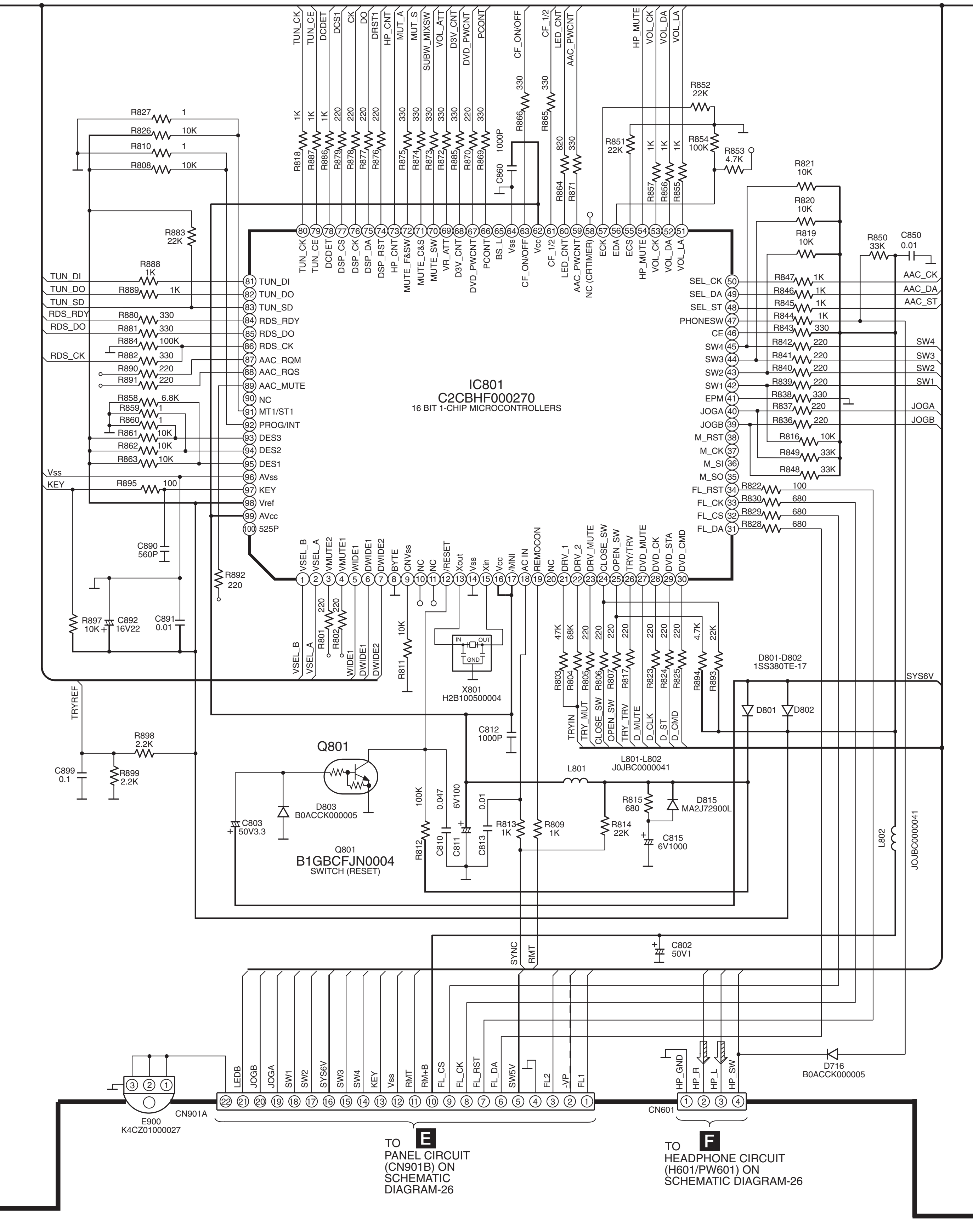
⇨ : DVD VIDEO SIGNAL LINE


VIDEO+B
Q1008
B1ABCF000011
INVERTER SWITCH
Q1009
B1GDCFJJ0002
INVERTER SWITCH
Q1008
Q1009
R1023
18K
R1024
22K
Q1001
B1GBCFJJ0007
INVERTER SWITCH
Q1003
B1GBCFJJ0007
INVERTER SWITCH
Q1003
WIDE1
Q1001
R1005
2.2K
D1001
B0ACCK000005
Q1010
2SA1576A106R
INVERTER SWITCH
Q1004
R1054
2.2K
R1025
2.2K
Q1004
B1GBCFJJ0007
INVERTER SWITCH
Q1005
B1GBCFJJ0007
INVERTER SWITCH
R1026
4.7K
Q1005
DWDE1
Q1010
R1027
4.7K
DWDE2
R1032
10K
JK1002
A(B)OUT
R1034
8.2K
A(B)IN
R1031
10K
A(A)OUT
A-COM
RETURN
R1033
8.2K
A(A)IN
R1075
75
Z1063
BLUE I/O
FUNC SW
R1028
470
RETURN
CONT
IC1002
CIAB00001466
VIDEO SIGNAL SWITCHING
R1076
75
Z1064
GREEN I/O
NC
RETURN
RETURN
C1049
0.1
C1050
0.1
R1077
75
Z1065
RED I/O
BLK I/O
R1074
75
RETURN
RETURN
R1012
75
C1032
50V1
INY
VCC
IC1002
GND
OUT
R1010
75
C1031
50V1
INV
SW
R1078
75
Z1066
V-OUT
V-IN
C1098
0.01
R1073
75
GND
MONITOR OUT
R1011
75
R1009
75
C1072
0.01
INC
VCC
IC1003
C1002
0.01
GND
OUT
INR
SW
R1079
1
L1067-L1068
G0BYYYY00016
C1064
1
R1080
1
L1067
JK1001
Z1063-Z1069
J0JBC0000015
R1081
75
Z1067
V
S
C Y
R1084
75
Z1068
L1068
R1085
75
Z1069
IC1003
CIAB00001731
VIDEO SIGNAL SWITCHING
C1065
1
R1083
1
R1082
1

SCHEMATIC DIAGRAM-18

C MAIN CIRCUIT

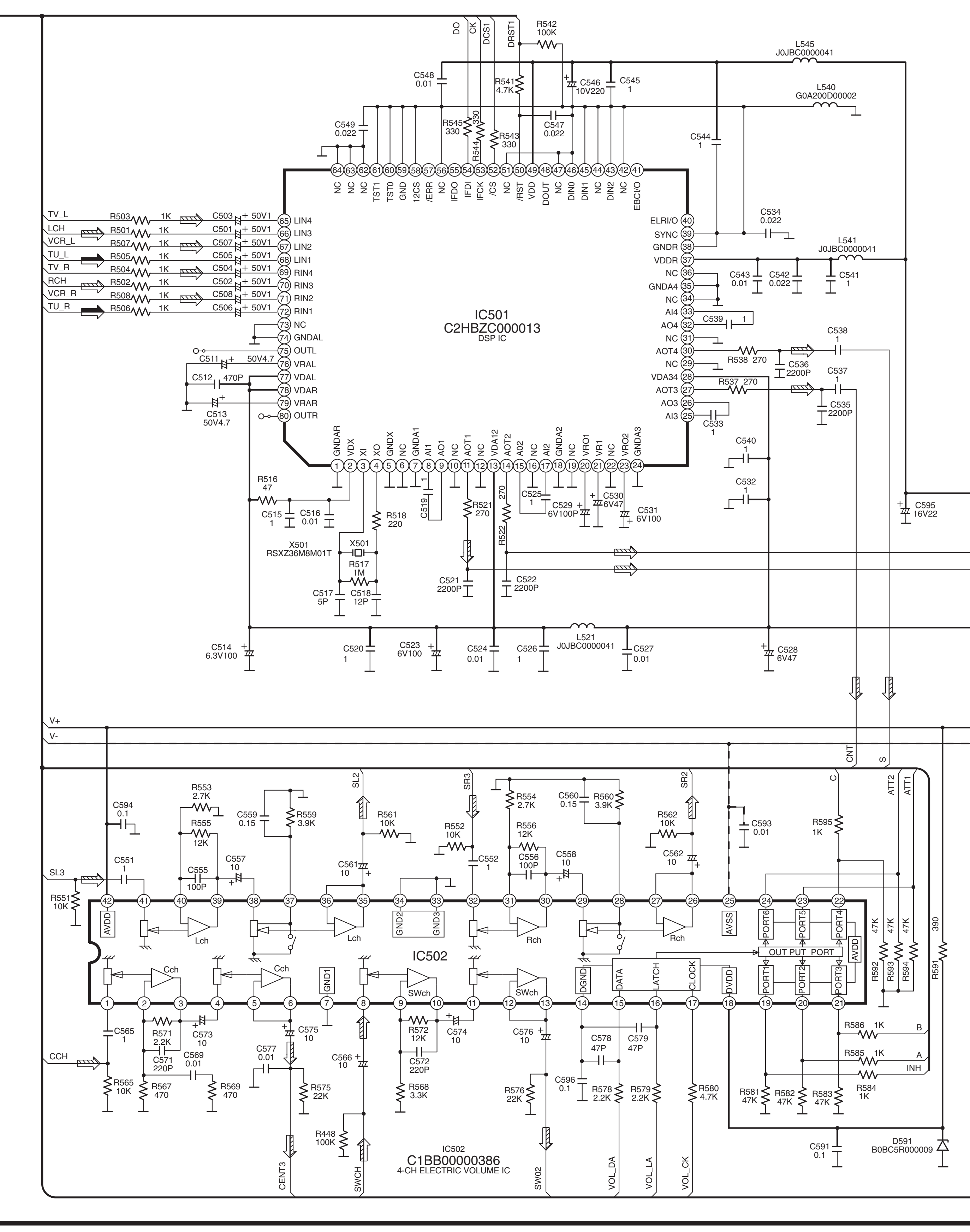
- - - : -B SIGNAL LINE
—— : +B SIGNAL LINE
⇨ : MAIN SIGNAL LINE


IC801
C2CBHF000270
16 BIT 1-CHIP MICROCONTROLLERS
TUN_CK
TUN_CE
DCDET
DCS1
CK
DO
DRST1
HP_CNT
MUT_A
MUT_S
SUBW_MIXSW
VOL_ATT
D3V_CNT
DVD_PWCNT
PCONT
CF_ON/OFF
CF_1/2
LED_CNT
AAC_PWCNT
HP_MUTE
VOL_CK
VOL_DA
VOL_LA
TUN_DI
TUN_DO
TUN_SD
RDS_RDY
RDS_DO
RDS_CK
AAC_RQM
AAC_RQS
AAC_MUTE
NC
MT1/ST1
PROG/INT
DES3
DES2
DES1
AVss
KEY
Vref
AVcc
525P
Vss
SEL_CK
SEL_DA
SEL_ST
PHONESW
CE
SW4
SW3
SW2
SW1
EPM
JOGA
JOGB
M_RST
M_CK
M_SI
M_SO
FL_RST
FL_CK
FL_CS
FL_DA
AAC_CK
AAC_DA
AAC_ST
VSEL_B
VSEL_A
VMUTE2
VMUTE1
WIDE1
DWIDE1
DWIDE2
BYTE
CNVss
/RESET
Xout
Xin
Vcc
/MNI
AC IN
REMOCON
DRV_1
DRV_2
DRV_MUTE
CLOSE_SW
OPEN_SW
TRY/TRV
DVD_MUTE
DVD_CK
DVD_STA
DVD_CMD
TRYIN
TRY_MUT
TRY_TRV
D_MUTE
D_CLK
D_ST
D_CMD
SYS6V
TRYREF
SYNC
RMT
R827 1
R826 10K
R810 1
R808 10K
R883 22K
R888 1K
R889 1K
R880 330
R881 330
R884 100K
R882 330
R890 220
R891 220
R858 6.8K
R859 1
R860 1
R861 10K
R862 10K
R863 10K
R895 100
C890 560P
R892 220
R897 10K
C892 16V22
C891 0.01
R898 2.2K
C899 0.1
R899 2.2K
C860 1000P
R866 330
R865 330
R864 820
R871 330
R852 22K
R851 22K
R854 100K
R853 4.7K
R857 1K
R856 1K
R855 1K
R821 10K
R820 10K
R819 10K
R850 33K
C850 0.01
R847 1K
R846 1K
R845 1K
R844 1K
R843 330
R842 220
R841 220
R840 220
R839 220
R838 330
R837 220
R836 220
R816 10K
R849 33K
R848 33K
R822 100
R830 680
R829 680
R828 680
R801 220
R802 220
R811 10K
X801
H2B100500004
C812 1000P
R803 47K
R804 68K
R805 220
R806 220
R807 220
R817 220
R823 220
R824 220
R825 220
R894 4.7K
R893 22K
D801-D802
1SS380TE-17
D801
D802
Q801
D803
B0ACCK000005
C803 50V3.3
Q801
B1GBCFJN0004
SWITCH (RESET)
R812 100K
C810 0.047
C811 6V100
C813 0.01
R813 1K
R809 1K
L801
L801-L802
J0JBC0000041
R814 22K
R815 680
D815
MA2J72900L
C815 6V1000
L802
J0JBC0000041
C802 50V1
D716
B0ACCK000005
E900
K4CZ01000027
CN901A
LEDB
JOGB
JOGA
SW1
SW2
SYS6V
SW3
SW4
KEY
Vss
RMT
RM+B
FL_CS
FL_CK
FL_RST
FL_DA
SW5V
FL2
-VP
FL1
CN601
HP_GND
HP_R
HP_L
HP_SW
TO E PANEL CIRCUIT (CN901B) ON SCHEMATIC DIAGRAM-26
TO F HEADPHONE CIRCUIT (H601/PW601) ON SCHEMATIC DIAGRAM-26

SCHEMATIC DIAGRAM-19

C MAIN CIRCUIT

- - - : -B SIGNAL LINE
——— : +B SIGNAL LINE
➡ : FM/AM SIGNAL LINE
⇨ : MAIN SIGNAL LINE

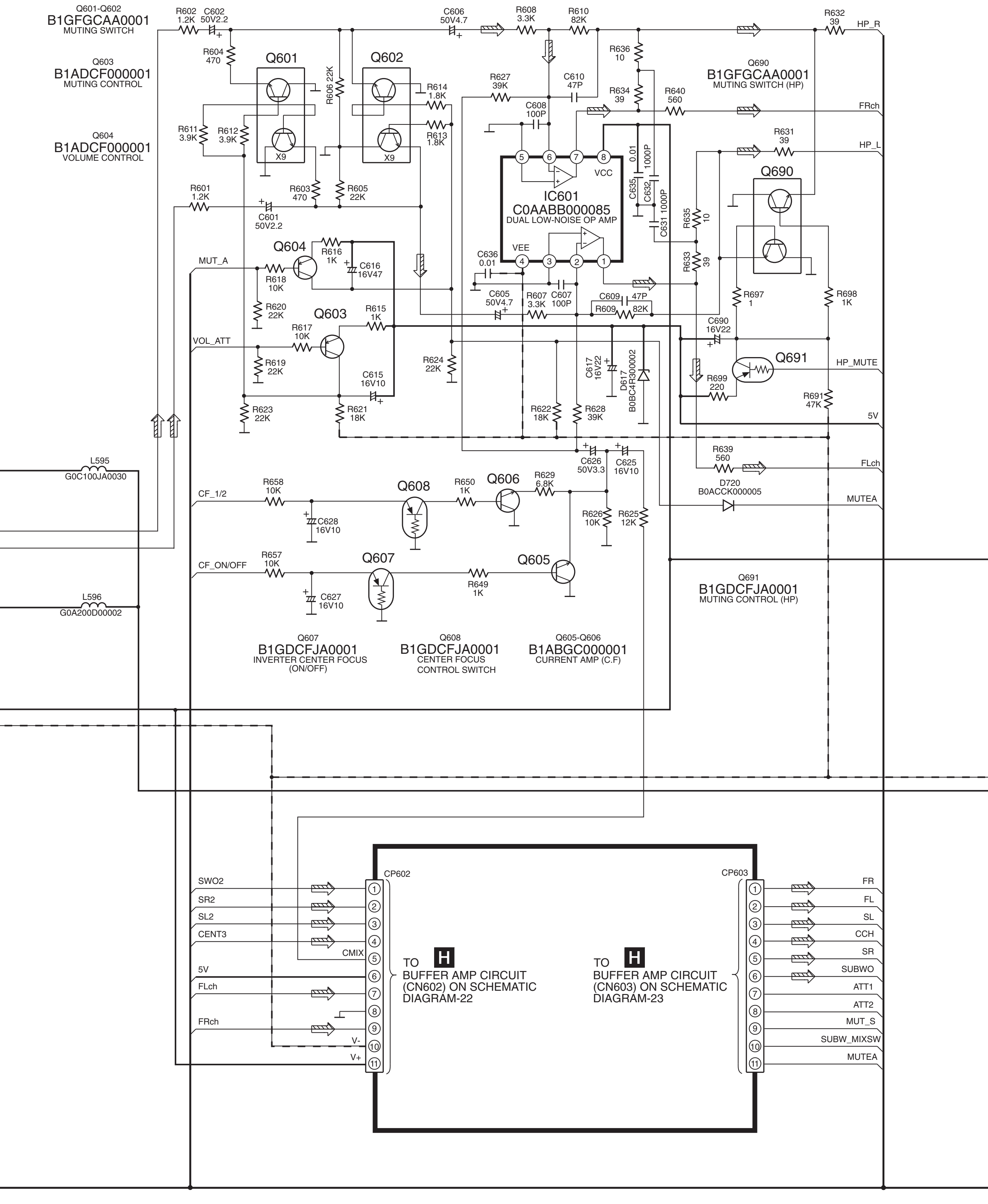


IC501
C2HBZC000013
DSP IC
DO
CK
DCS1
DRST1
R542 100K
L545 J0JBC0000041
L540 G0A200D00002
C548 0.01
R541 4.7K
C546 10V220
C545 1
C549 0.022
R545 330
R544 330
R543 330
C547 0.022
C544 1
NC
TST1
TST0
GND
12CS
/ERR
IFDO
IFDI
IFCK
/CS
/RST
VDD
DOUT
DIN0
DIN1
DIN2
EBCI/O
TV_L
LCH
VCR_L
TU_L
TV_R
RCH
VCR_R
TU_R
R503 1K
R501 1K
R507 1K
R505 1K
R504 1K
R502 1K
R508 1K
R506 1K
C503 50V1
C501 50V1
C507 50V1
C505 50V1
C504 50V1
C502 50V1
C508 50V1
C506 50V1
LIN4
LIN3
LIN2
LIN1
RIN4
RIN3
RIN2
RIN1
GNDAL
OUTL
VRAL
VDAL
VDAR
VRAR
OUTR
C511 50V4.7
C512 470P
C513 50V4.7
ELRI/O
SYNC
GNDR
VDDR
GNDA4
AI4
AO4
AOT4
VDA34
AOT3
AO3
AI3
C534 0.022
L541 J0JBC0000041
C543 0.01
C542 0.022
C541 1
C539 1
C538 1
R538 270
C536 2200P
C537 1
R537 270
C535 2200P
C533 1
GNDAR
VDX
XI
XO
GNDX
GNDA1
AI1
AO1
AOT1
VDA12
AOT2
A02
AI2
GNDA2
VRO1
VR1
VRO2
GNDA3
R516 47
C515 1
C516 0.01
R518 220
C519 1
R521 270
R522 270
C525 1
C529 6V100P
C530 6V47
C531 6V100
C540 1
C532 1
C595 16V22
X501 RSXZ36M8M01T
R517 1M
C517 5P
C518 12P
C521 2200P
C522 2200P
C514 6.3V100
C520 1
C523 6V100
C524 0.01
C526 1
L521 J0JBC0000041
C527 0.01
C528 6V47
V+
V-
CNT
S
C
ATT2
ATT1
SL2
SR3
SR2
SL3
CCH
R553 2.7K
R555 12K
C559 0.15
R559 3.9K
C594 0.1
C551 1
C555 100P
C557 10
R551 10K
R561 10K
C561 10
R554 2.7K
R552 10K
C552 1
R556 12K
C556 100P
C558 10
C560 0.15
R560 3.9K
R562 10K
C562 10
C593 0.01
R595 1K
AVDD
Lch
GND2
GND3
Rch
AVSS
PORT6
PORT5
PORT4
OUT PUT PORT
PORT1
PORT2
PORT3
IC502
Cch
GND1
SWch
DGND
DATA
LATCH
CLOCK
DVDD
R592 47K
R593 47K
R594 47K
R591 390
C565 1
R571 2.2K
C573 10
C571 220P
C569 0.01
C575 10
C577 0.01
R565 10K
R567 470
R569 470
R575 22K
C566 10
R572 12K
C574 10
C572 220P
R568 3.3K
C576 10
R576 22K
C578 47P
C579 47P
C596 0.1
R578 2.2K
R579 2.2K
R580 4.7K
R586 1K
R585 1K
R584 1K
B
A
INH
R581 47K
R582 47K
R583 47K
R448 100K
C591 0.1
D591 B0BC5R000009
CENT3
SWCH
SW02
VOL_DA
VOL_LA
VOL_CK
IC502
C1BB00000386
4-CH ELECTRIC VOLUME IC

SCHEMATIC DIAGRAM-20

C MAIN CIRCUIT

- - - : -B SIGNAL LINE
—— : +B SIGNAL LINE
⇨ : MAIN SIGNAL LINE



Q601-Q602
B1GFGCAA0001
MUTING SWITCH
Q603
B1ADCF000001
MUTING CONTROL
Q604
B1ADCF000001
VOLUME CONTROL
R602 1.2K
C602 50V2.2
R604 470
Q601
Q602
R606 22K
R614 1.8K
R613 1.8K
R611 3.9K
R612 3.9K
X9
X9
R601 1.2K
C601 50V2.2
R603 470
R605 22K
Q604
R616 1K
C616 16V47
MUT_A
R618 10K
R620 22K
Q603
R615 1K
R617 10K
VOL_ATT
R619 22K
C615 16V10
R623 22K
R621 18K
C606 50V4.7
R608 3.3K
R610 82K
R636 10
R627 39K
C610 47P
C608 100P
R634 39
R640 560
IC601
C0AABB000085
DUAL LOW-NOISE OP AMP
VCC
VEE
0.01
C635
1000P
C632
C631 1000P
C636 0.01
C605 50V4.7
R607 3.3K
C607 100P
C609 47P
R609 82K
R624 22K
C617 16V22
D617 B0BC4R300002
R622 18K
R628 39K
C626 50V3.3
C625 16V10
R632 39
HP_R
Q690
B1GFGCAA0001
MUTING SWITCH (HP)
FRch
R631 39
HP_L
Q690
R635 10
R633 39
R697 1
R698 1K
C690 16V22
Q691
HP_MUTE
R699 220
R691 47K
5V
R639 560
FLch
D720
B0ACCK000005
MUTEA
L595
G0C100JA0030
L596
G0A200D00002
CF_1/2
R658 10K
C628 16V10
Q608
R650 1K
Q606
R629 6.8K
R626 10K
R625 12K
CF_ON/OFF
R657 10K
C627 16V10
Q607
R649 1K
Q605
Q691
B1GDCFJA0001
MUTING CONTROL (HP)
Q607
B1GDCFJA0001
INVERTER CENTER FOCUS
(ON/OFF)
Q608
B1GDCFJA0001
CENTER FOCUS
CONTROL SWITCH
Q605-Q606
B1ABGC000001
CURRENT AMP (C.F)
CP602
SWO2
SR2
SL2
CENT3
CMIX
5V
FLch
FRch
V-
V+
TO H
BUFFER AMP CIRCUIT
(CN602) ON SCHEMATIC
DIAGRAM-22
TO H
BUFFER AMP CIRCUIT
(CN603) ON SCHEMATIC
DIAGRAM-23
CP603
FR
FL
SL
CCH
SR
SUBWO
ATT1
ATT2
MUT_S
SUBW_MIXSW
MUTEA

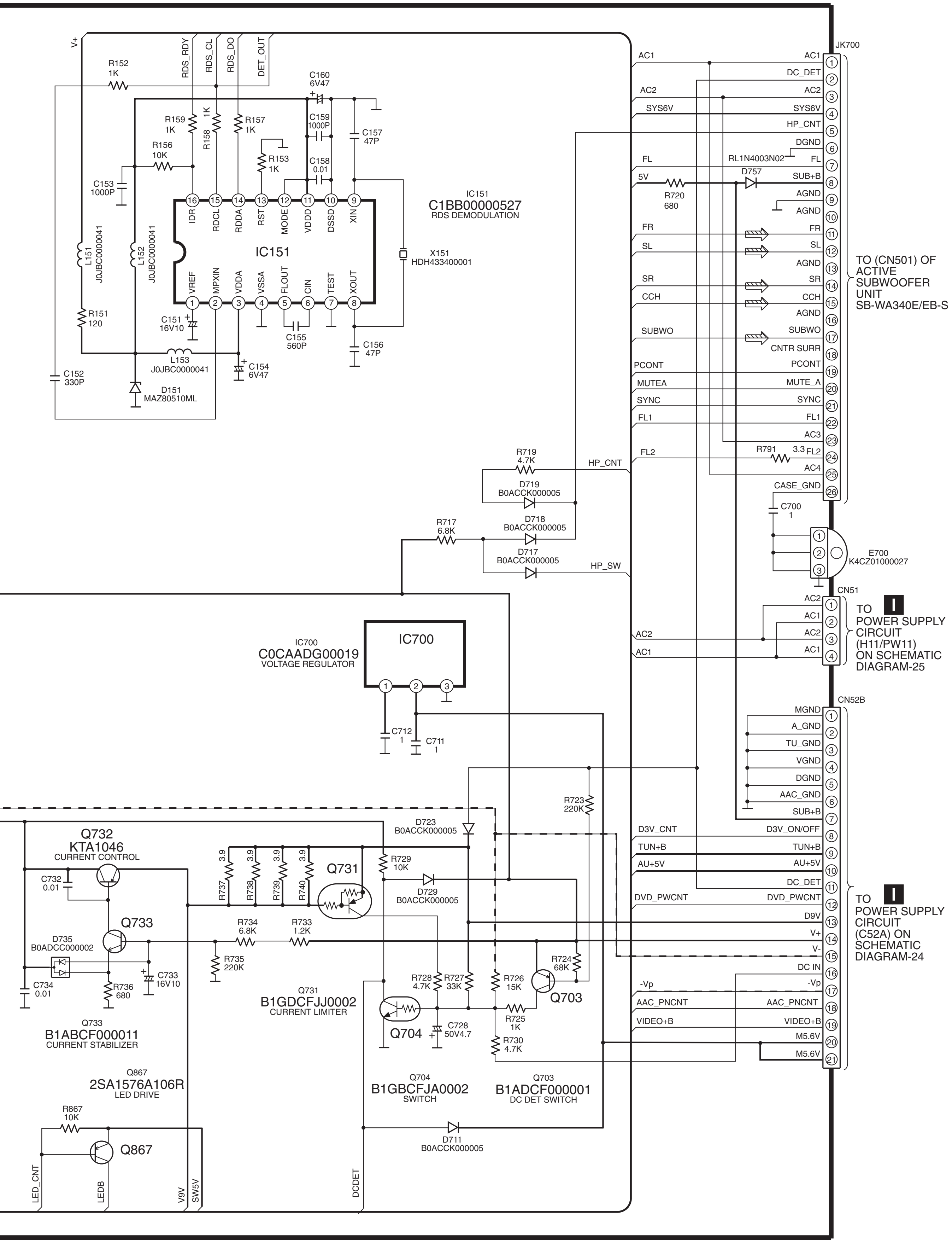
SCHEMATIC DIAGRAM-21

C MAIN CIRCUIT

- - - - : -B SIGNAL LINE

——— : +B SIGNAL LINE

⇨ : MAIN SIGNAL LINE



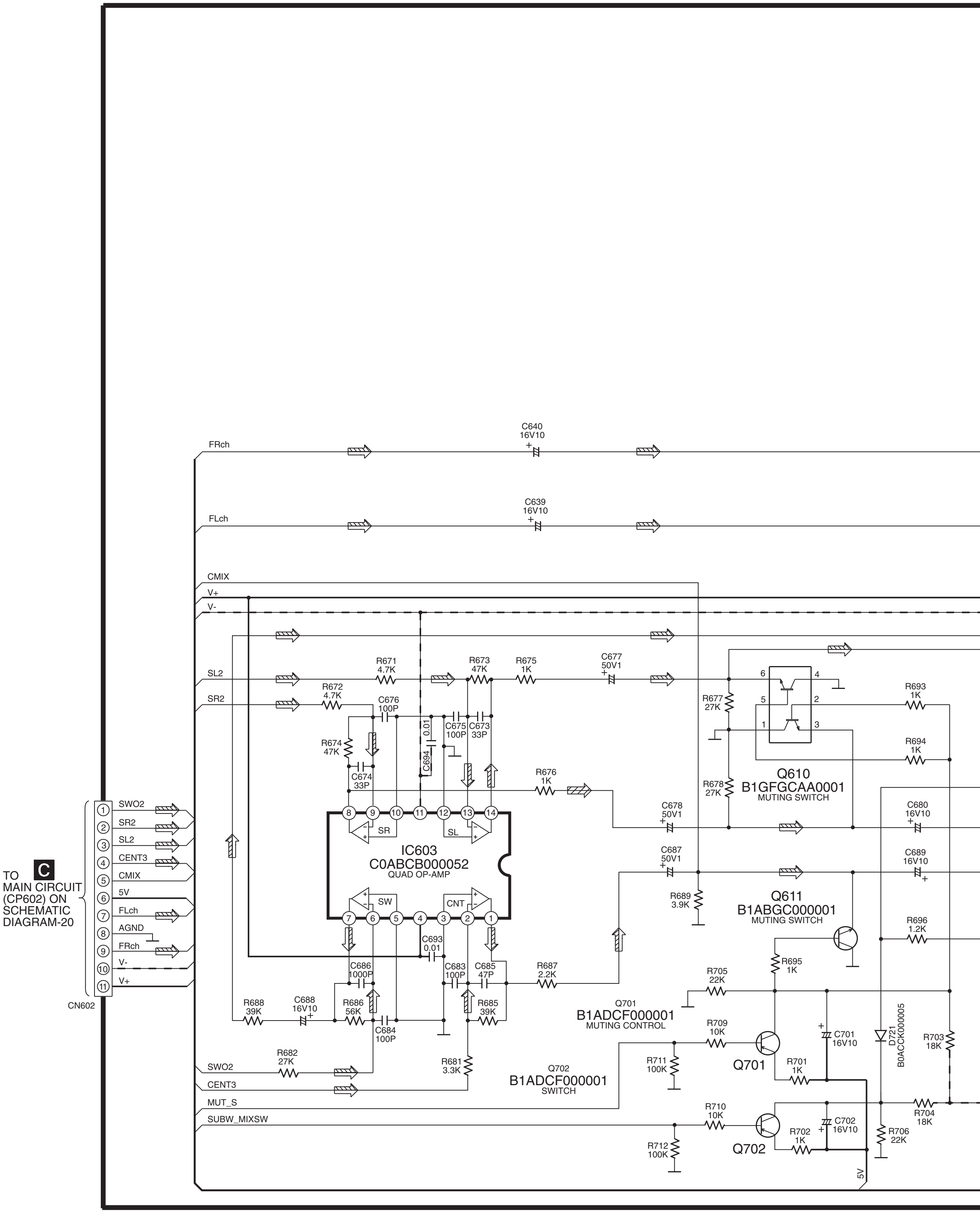
V+
R152 1K
RDS_RDY
RDS_CL
RDS_DO
DET_OUT
C160 6V47
C159 1000P
C157 47P
R159 1K
R158 1K
R157 1K
R153 1K
C158 0.01
R156 10K
C153 1000P
IC151 C1BB00000527 RDS DEMODULATION
IDR
RDCL
RDDA
RST
MODE
VDDD
DSSD
XIN
IC151
VREF
MPXIN
VDDA
VSSA
FLOUT
CIN
TEST
XOUT
X151 HDH433400001
L151 J0JBC0000041
L152 J0JBC0000041
R151 120
C151 16V10
C155 560P
C156 47P
L153 J0JBC0000041
C154 6V47
C152 330P
D151 MAZ80510ML
R719 4.7K
D719 B0ACCK000005
HP_CNT
R717 6.8K
D718 B0ACCK000005
D717 B0ACCK000005
HP_SW
IC700 C0CAADG00019 VOLTAGE REGULATOR
IC700
C712 1
C711 1
R723 220K
D723 B0ACCK000005
Q732 KTA1046 CURRENT CONTROL
C732 0.01
R737 3.9
R738 3.9
R739 3.9
R740 3.9
Q731
R729 10K
D729 B0ACCK000005
Q733
D735 B0ADCC000002
R734 6.8K
R733 1.2K
R735 220K
C734 0.01
R736 680
C733 16V10
Q731 B1GDCFJJ0002 CURRENT LIMITER
R728 4.7K
R727 33K
R726 15K
R724 68K
Q703
R725 1K
C728 50V4.7
Q704
R730 4.7K
Q733 B1ABCF000011 CURRENT STABILIZER
Q867 2SA1576A106R LED DRIVE
R867 10K
Q867
Q704 B1GBCFJA0002 SWITCH
Q703 B1ADCF000001 DC DET SWITCH
D711 B0ACCK000005
LED_CNT
LEDB
V9V
SW5V
DCDET
AC1
AC2
SYS6V
FL
5V
R720 680
FR
SL
SR
CCH
SUBWO
PCONT
MUTEA
SYNC
FL1
FL2
RL1N4003N02
D757
R791 3.3
JK700
AC1 ①
DC_DET ②
AC2 ③
SYS6V ④
HP_CNT ⑤
DGND ⑥
FL ⑦
SUB+B ⑧
AGND ⑨
AGND ⑩
FR ⑪
SL ⑫
AGND ⑬
SR ⑭
CCH ⑮
AGND ⑯
SUBWO ⑰
CNTR SURR ⑱
PCONT ⑲
MUTE_A ⑳
SYNC (21)
FL1 (22)
AC3 (23)
FL2 (24)
AC4 (25)
CASE_GND (26)
TO (CN501) OF ACTIVE SUBWOOFER UNIT SB-WA340E/EB-S
C700 1
E700 K4CZ01000027
CN51
AC2 ①
AC1 ②
AC2 ③
AC1 ④
TO I POWER SUPPLY CIRCUIT (H11/PW11) ON SCHEMATIC DIAGRAM-25
CN52B
MGND ①
A_GND ②
TU_GND ③
VGND ④
DGND ⑤
AAC_GND ⑥
SUB+B ⑦
D3V_CNT
D3V_ON/OFF ⑧
TUN+B ⑨
AU+5V ⑩
DC_DET ⑪
DVD_PWCNT ⑫
D9V ⑬
V+ ⑭
V- ⑮
DC IN ⑯
-Vp ⑰
AAC_PNCNT ⑱
VIDEO+B ⑲
M5.6V ⑳
M5.6V (21)
TO I POWER SUPPLY CIRCUIT (C52A) ON SCHEMATIC DIAGRAM-24

SCHEMATIC DIAGRAM-22

H Side A Side B

BUFFER AMP CIRCUIT

- - - : -B SIGNAL LINE
—— : +B SIGNAL LINE
⇨ : MAIN SIGNAL LINE

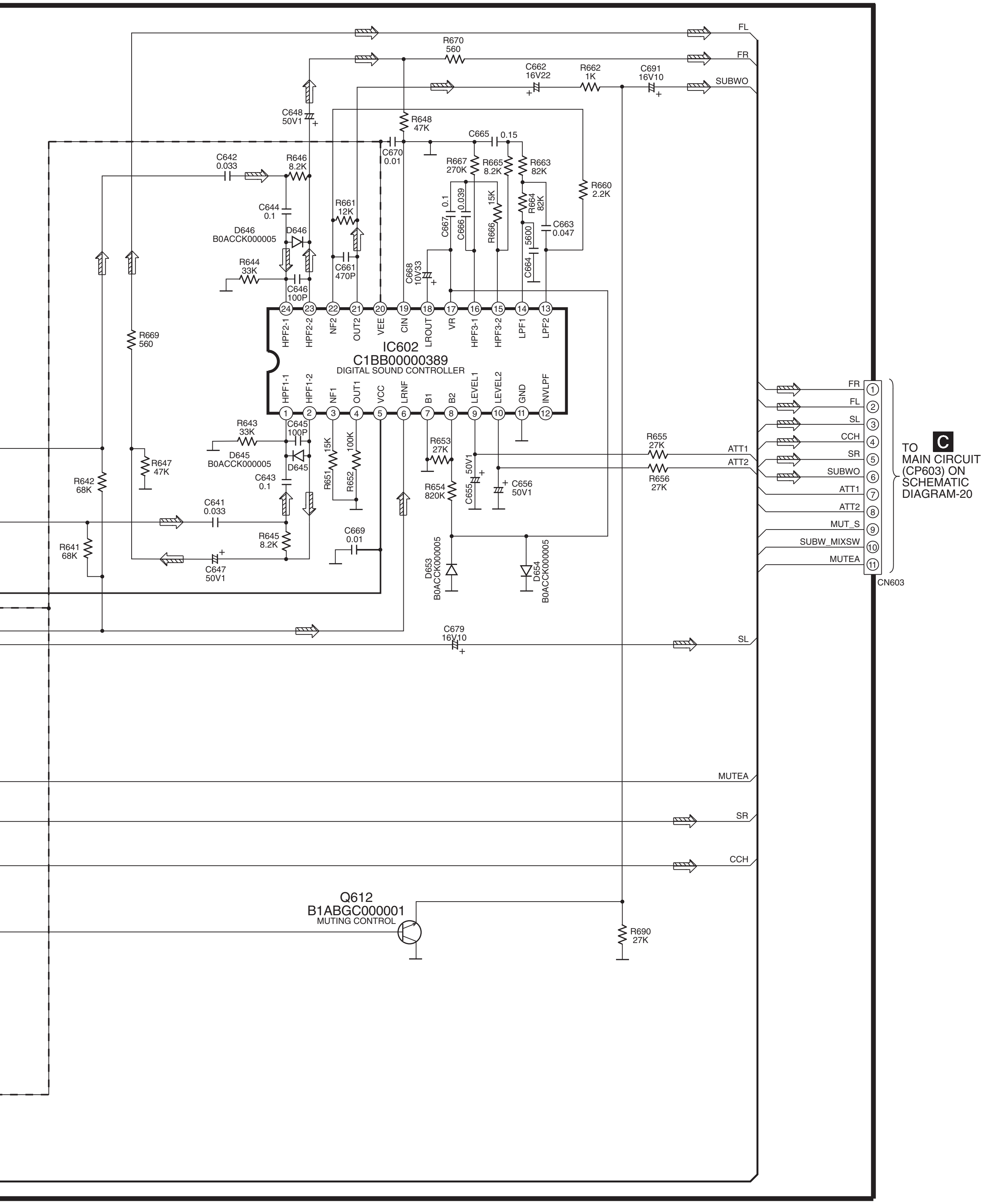


FRch
C640
16V10
FLch
C639
16V10
CMIX
V+
V-
SL2
SR2
R671
4.7K
R672
4.7K
R673
47K
R675
1K
C677
50V1
C676
100P
0.01
C694
C675
100P
C673
33P
R674
47K
C674
33P
R676
1K
SR
SL
IC603
C0ABCB000052
QUAD OP-AMP
SW
CNT
8
9
10
11
12
13
14
7
6
5
4
3
2
1
C693
0.01
C686
1000P
C683
100P
C685
47P
R687
2.2K
R688
39K
C688
16V10
R686
56K
C684
100P
R685
39K
R681
3.3K
R682
27K
SWO2
CENT3
MUT_S
SUBW_MIXSW
R677
27K
R678
27K
6
5
1
4
2
3
Q610
B1GFGCAA0001
MUTING SWITCH
R693
1K
R694
1K
C678
50V1
C680
16V10
C687
50V1
C689
16V10
R689
3.9K
Q611
B1ABGC000001
MUTING SWITCH
R696
1.2K
R695
1K
R705
22K
Q701
B1ADCF000001
MUTING CONTROL
R709
10K
C701
16V10
D721
B0ACCK000005
R703
18K
R711
100K
Q701
R701
1K
Q702
B1ADCF000001
SWITCH
R710
10K
C702
16V10
R702
1K
R704
18K
R706
22K
R712
100K
Q702
5V
TO
C
MAIN CIRCUIT
(CP602) ON
SCHEMATIC
DIAGRAM-20
1 SWO2
2 SR2
3 SL2
4 CENT3
5 CMIX
6 5V
7 FLch
8 AGND
9 FRch
10 V-
11 V+
CN602

SCHEMATIC DIAGRAM-23

H BUFFER AMP CIRCUIT

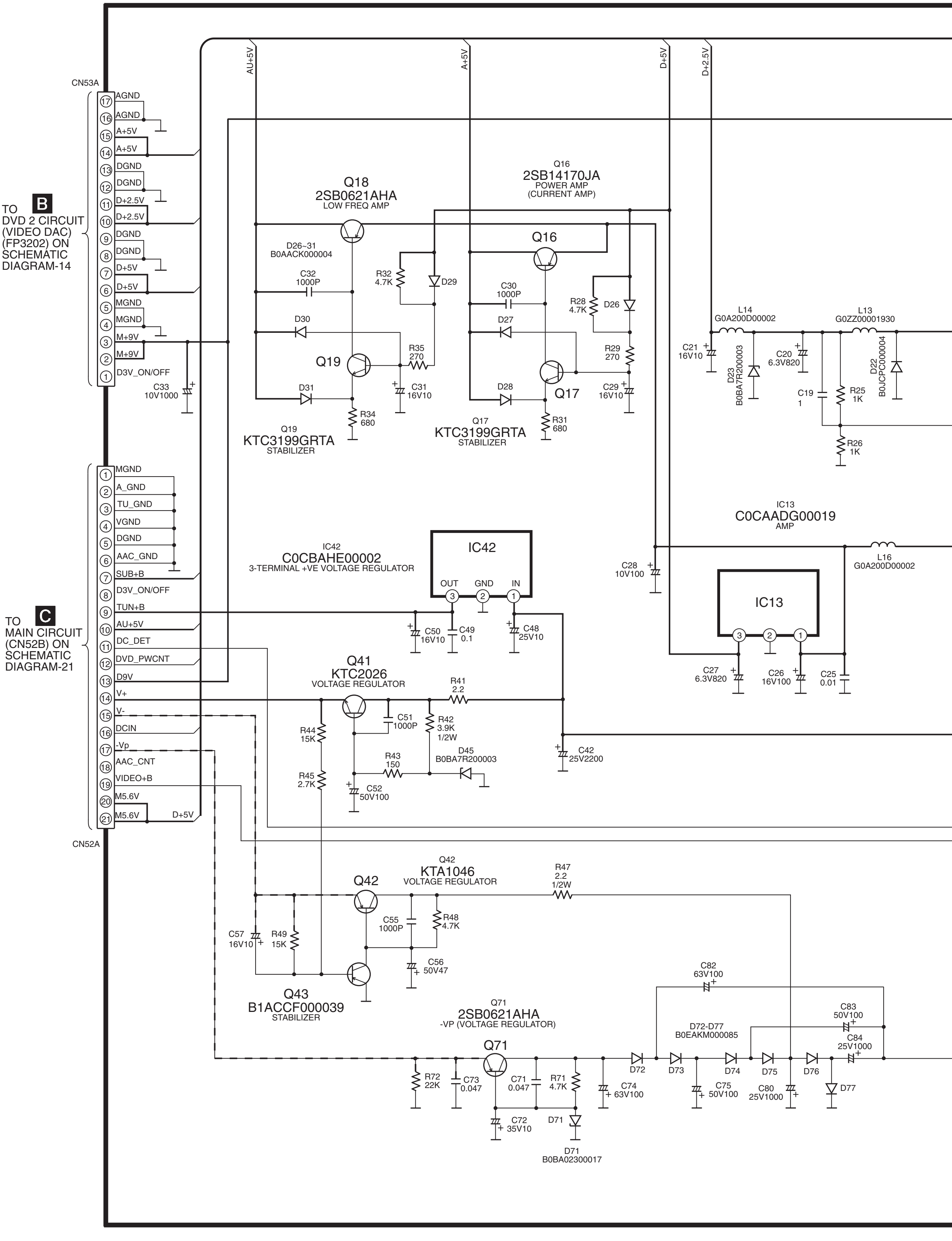
- - - : -B SIGNAL LINE
—— : +B SIGNAL LINE
⇨ : MAIN SIGNAL LINE


FL
FR
SUBWO
R670
560
C662
16V22
R662
1K
C691
16V10
C648
50V1
R648
47K
C665
0.15
C642
0.033
R646
8.2K
C670
0.01
R667
270K
R665
8.2K
R663
82K
R660
2.2K
C644
0.1
R661
12K
0.1
0.039
15K
R664
82K
C667
C666
R666
5600
C663
0.047
D646
B0ACCK000005
D646
C661
470P
C668
10V33
C664
R644
33K
C646
100P
24 HPF2-1
23 HPF2-2
22 NF2
21 OUT2
20 VEE
19 CIN
18 LROUT
17 VR
16 HPF3-1
15 HPF3-2
14 LPF1
13 LPF2
IC602
C1BB00000389
DIGITAL SOUND CONTROLLER
1 HPF1-1
2 HPF1-2
3 NF1
4 OUT1
5 VCC
6 LRNF
7 B1
8 B2
9 LEVEL1
10 LEVEL2
11 GND
12 INVLPF
R669
560
R643
33K
C645
100P
D645
B0ACCK000005
D645
R647
47K
15K
100K
R651
R652
R653
27K
50V1
C655
C656
50V1
R654
820K
R655
27K
R656
27K
ATT1
ATT2
R642
68K
C643
0.1
C641
0.033
R645
8.2K
C669
0.01
R641
68K
C647
50V1
D653
B0ACCK000005
D654
B0ACCK000005
FR ①
FL ②
SL ③
CCH ④
SR ⑤
SUBWO ⑥
ATT1 ⑦
ATT2 ⑧
MUT_S ⑨
SUBW_MIXSW ⑩
MUTEA ⑪
CN603
TO C MAIN CIRCUIT (CP603) ON SCHEMATIC DIAGRAM-20
C679
16V10
SL
MUTEA
SR
CCH
Q612
B1ABGC000001
MUTING CONTROL
R690
27K

SCHEMATIC DIAGRAM-24

I POWER SUPPLY CIRCUIT

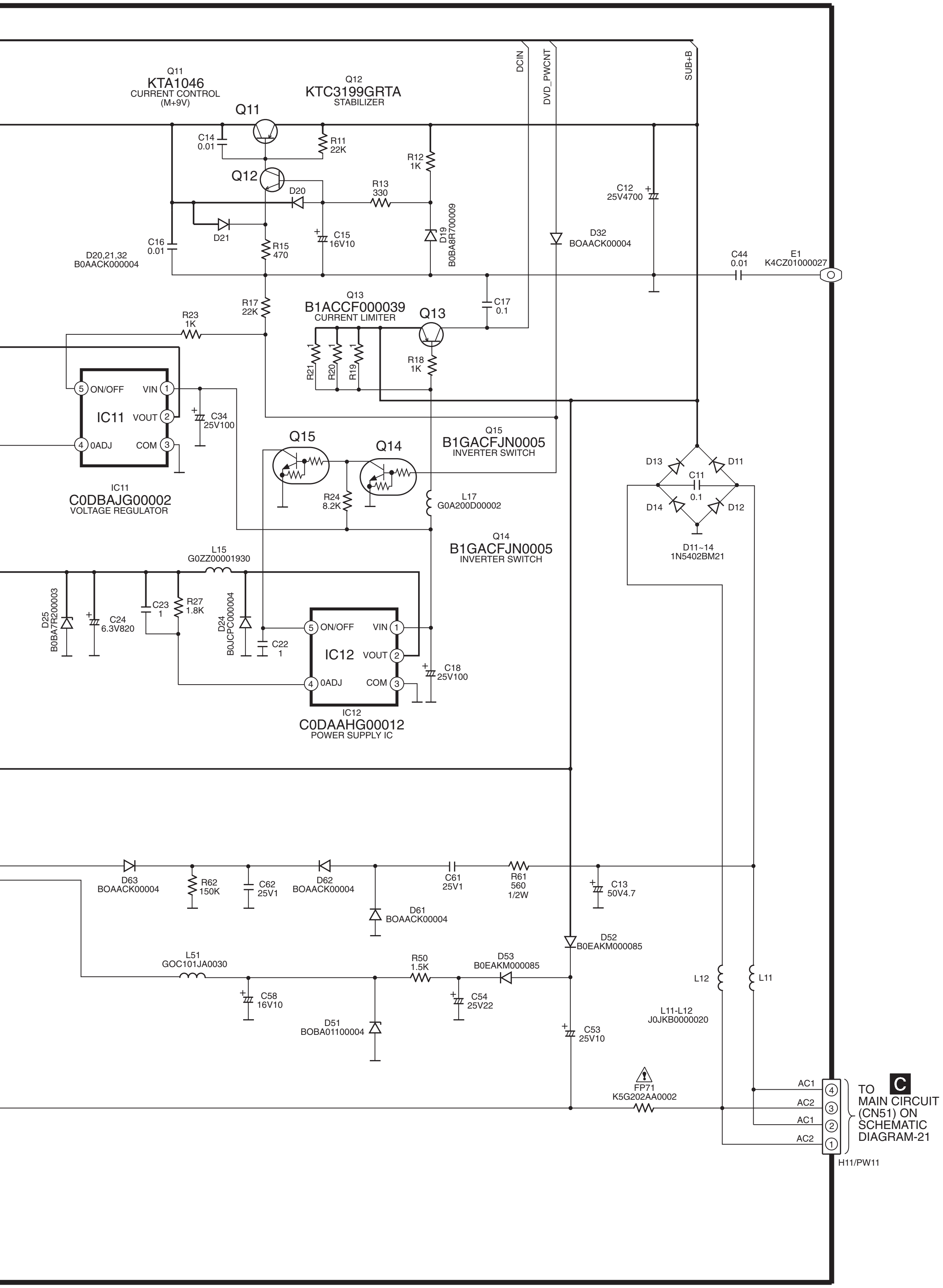
- - - : -B SIGNAL LINE
——— : +B SIGNAL LINE


CN53A
17 AGND
16 AGND
15 A+5V
14 A+5V
13 DGND
12 DGND
11 D+2.5V
10 D+2.5V
9 DGND
8 DGND
7 D+5V
6 D+5V
5 MGND
4 MGND
3 M+9V
2 M+9V
1 D3V_ON/OFF
TO B DVD 2 CIRCUIT (VIDEO DAC) (FP3202) ON SCHEMATIC DIAGRAM-14
C33 10V1000
AU+5V
A+5V
D+5V
D+2.5V
Q18 2SB0621AHA LOW FREQ AMP
D26~31 B0AACK000004
C32 1000P
R32 4.7K
D29
D30
R35 270
Q19
C31 16V10
D31
R34 680
Q19 KTC3199GRTA STABILIZER
Q16 2SB14170JA POWER AMP (CURRENT AMP)
Q16
C30 1000P
R28 4.7K
D26
D27
R29 270
D28
Q17
C29 16V10
R31 680
Q17 KTC3199GRTA STABILIZER
L14 G0A200D00002
C21 16V10
D23 B0BA7R200003
C20 6.3V820
L13 G0ZZ00001930
D22 B0JCPC000004
C19 1
R25 1K
R26 1K
IC13 C0CAADG00019 AMP
L16 G0A200D00002
C28 10V100
IC13
3 2 1
C27 6.3V820
C26 16V100
C25 0.01
CN52A
1 MGND
2 A_GND
3 TU_GND
4 VGND
5 DGND
6 AAC_GND
7 SUB+B
8 D3V_ON/OFF
9 TUN+B
10 AU+5V
11 DC_DET
12 DVD_PWCNT
13 D9V
14 V+
15 V-
16 DCIN
17 -Vp
18 AAC_CNT
19 VIDEO+B
20 M5.6V
21 M5.6V
D+5V
TO C MAIN CIRCUIT (CN52B) ON SCHEMATIC DIAGRAM-21
IC42 C0CBAHE00002 3-TERMINAL +VE VOLTAGE REGULATOR
IC42
OUT GND IN
3 2 1
C50 16V10
C49 0.1
C48 25V10
Q41 KTC2026 VOLTAGE REGULATOR
R41 2.2
C51 1000P
R42 3.9K 1/2W
R44 15K
R43 150
D45 B0BA7R200003
R45 2.7K
C52 50V100
C42 25V2200
Q42 KTA1046 VOLTAGE REGULATOR
Q42
R47 2.2 1/2W
C55 1000P
R48 4.7K
C57 16V10
R49 15K
C56 50V47
Q43 B1ACCF000039 STABILIZER
Q71 2SB0621AHA -VP (VOLTAGE REGULATOR)
Q71
C82 63V100
C83 50V100
D72-D77 B0EAKM000085
C84 25V1000
R72 22K
C73 0.047
C71 0.047
R71 4.7K
C74 63V100
D72
D73
D74
D75
D76
D77
C75 50V100
C80 25V1000
C72 35V10
D71
D71 B0BA02300017

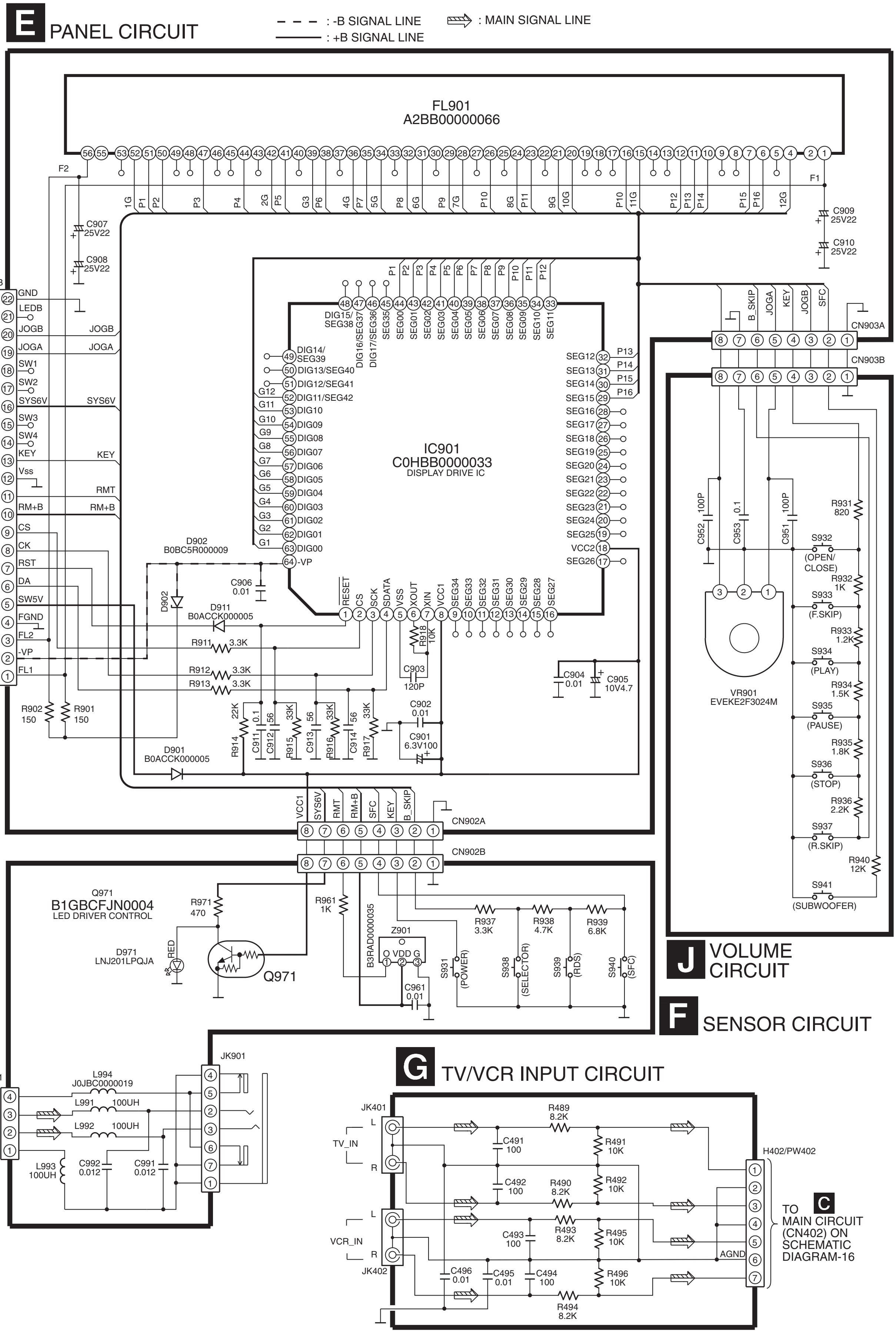
SCHEMATIC DIAGRAM-25

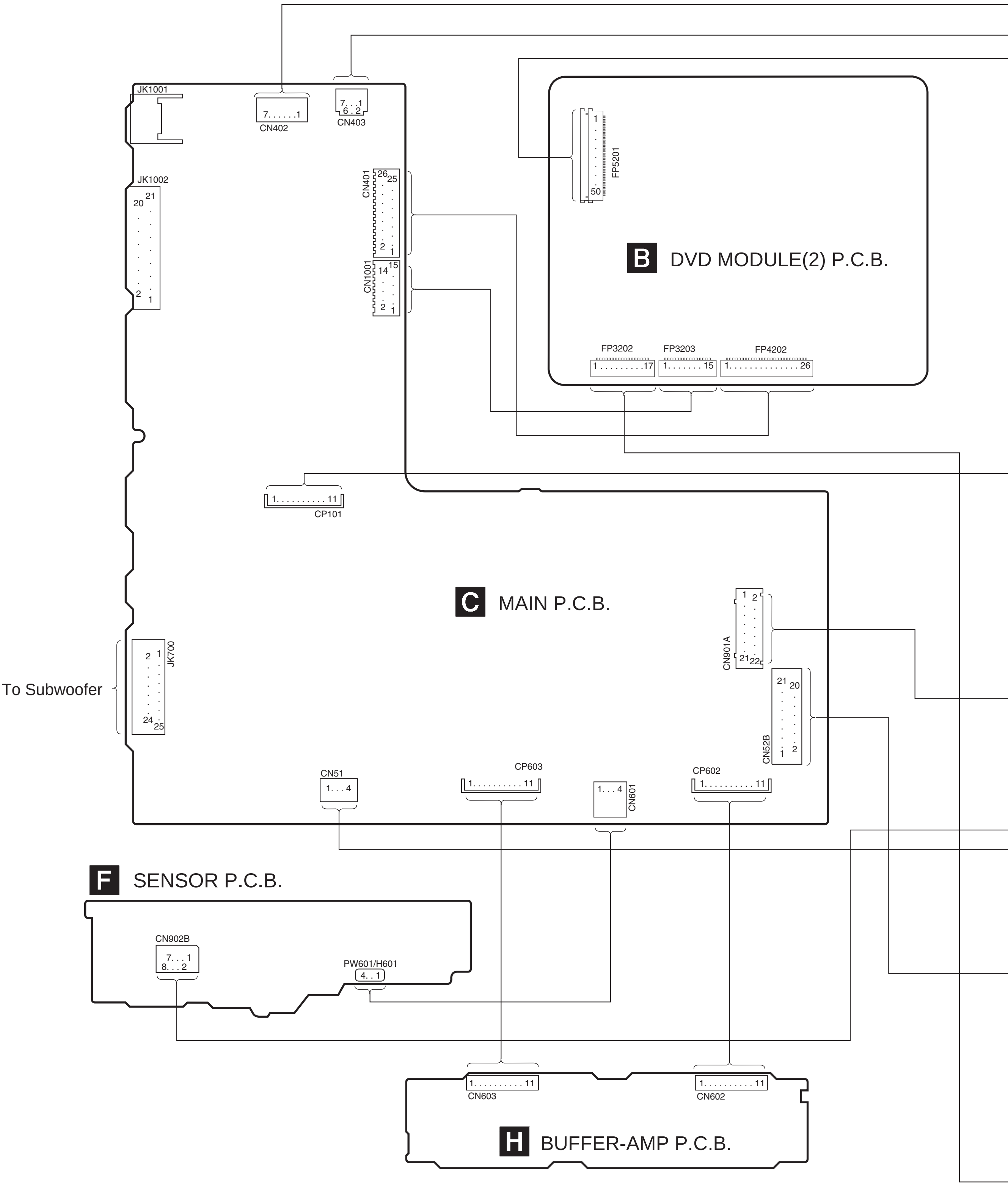
I POWER SUPPLY CIRCUIT

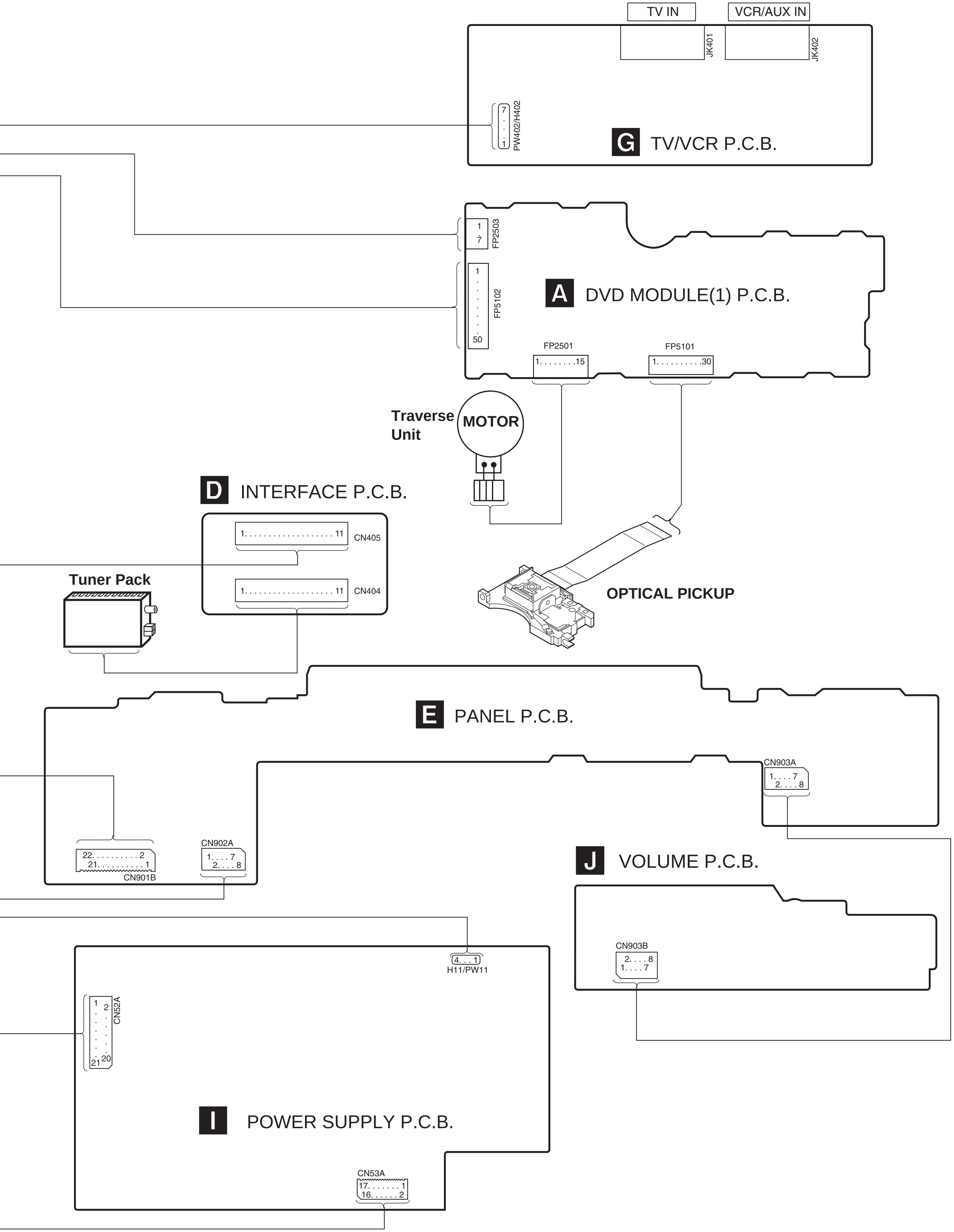
: +B SIGNAL LINE

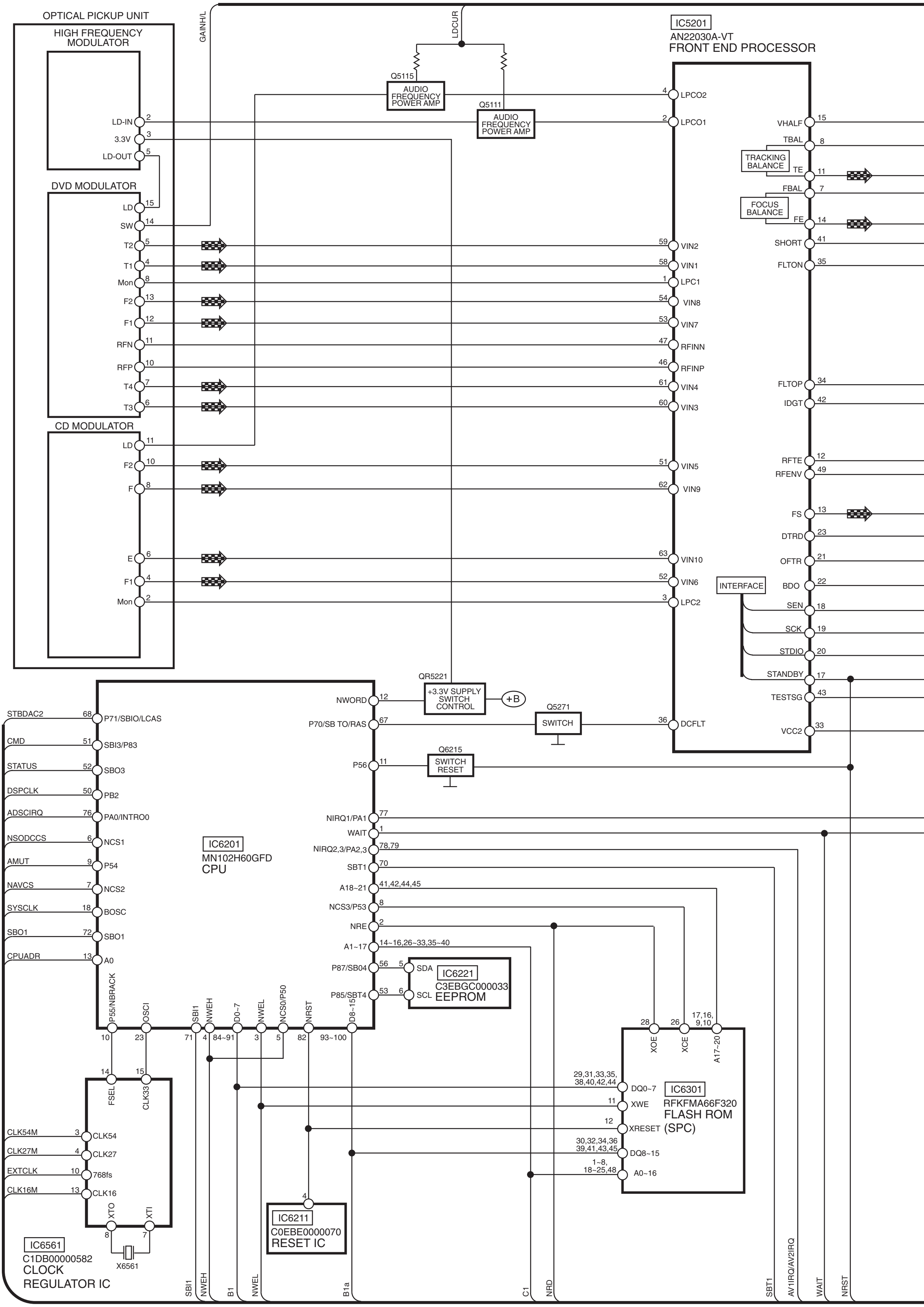

Q11
KTA1046
CURRENT CONTROL
(M+9V)
Q12
KTC3199GRTA
STABILIZER
Q11
Q12
DCIN
DVD_PWCNT
SUB+B
C14
0.01
R11
22K
R12
1K
R13
330
D20
C12
25V4700
D21
C15
16V10
D19
B0BA8R700009
D32
BOAACK00004
C16
0.01
R15
470
D20,21,32
B0AACK000004
C44
0.01
E1
K4CZ01000027
Q13
B1ACCF000039
CURRENT LIMITER
Q13
R17
22K
C17
0.1
R23
1K
R21
1
R20
1
R19
1
R18
1K
5 ON/OFF
VIN 1
IC11
VOUT 2
4 0ADJ
COM 3
C34
25V100
Q15
Q14
Q15
B1GACFJN0005
INVERTER SWITCH
D13
D11
C11
0.1
D14
D12
D11~14
1N5402BM21
IC11
C0DBAJG00002
VOLTAGE REGULATOR
R24
8.2K
L17
G0A200D00002
Q14
B1GACFJN0005
INVERTER SWITCH
L15
G0ZZ00001930
D25
B0BA7R200003
C24
6.3V820
C23
1
R27
1.8K
D24
B0JCPC000004
C22
1
5 ON/OFF
VIN 1
IC12
VOUT 2
4 0ADJ
COM 3
C18
25V100
IC12
C0DAAHG00012
POWER SUPPLY IC
D63
BOAACK00004
R62
150K
C62
25V1
D62
BOAACK00004
C61
25V1
R61
560
1/2W
C13
50V4.7
D61
BOAACK00004
D52
B0EAKM000085
L51
GOC101JA0030
R50
1.5K
D53
B0EAKM000085
L12
L11
C58
16V10
C54
25V22
L11-L12
J0JKB0000020
D51
BOBA01100004
C53
25V10
FP71
K5G202AA0002
AC1 4
AC2 3
AC1 2
AC2 1
H11/PW11
TO C MAIN CIRCUIT (CN51) ON SCHEMATIC DIAGRAM-21

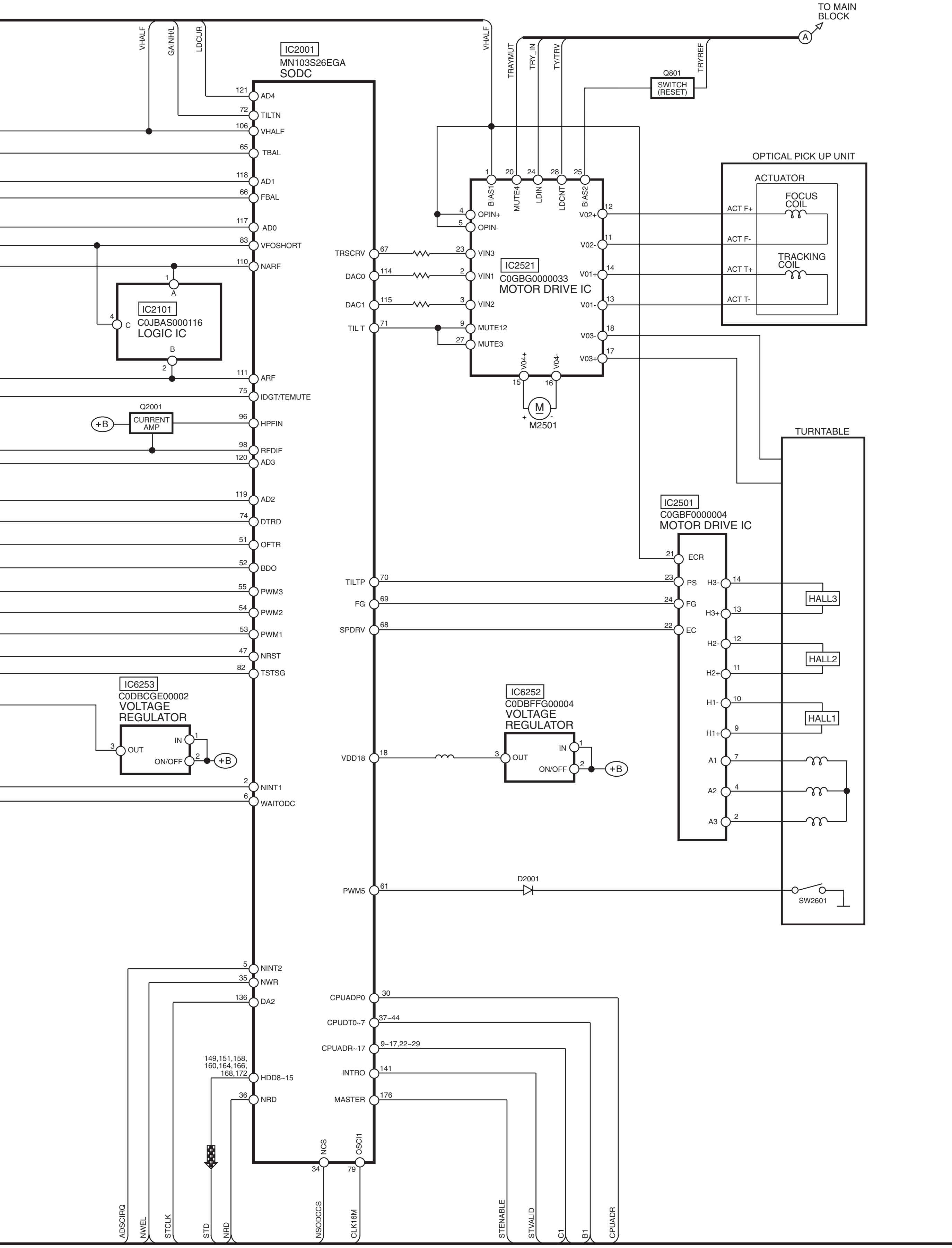
SCHEMATIC DIAGRAM-26

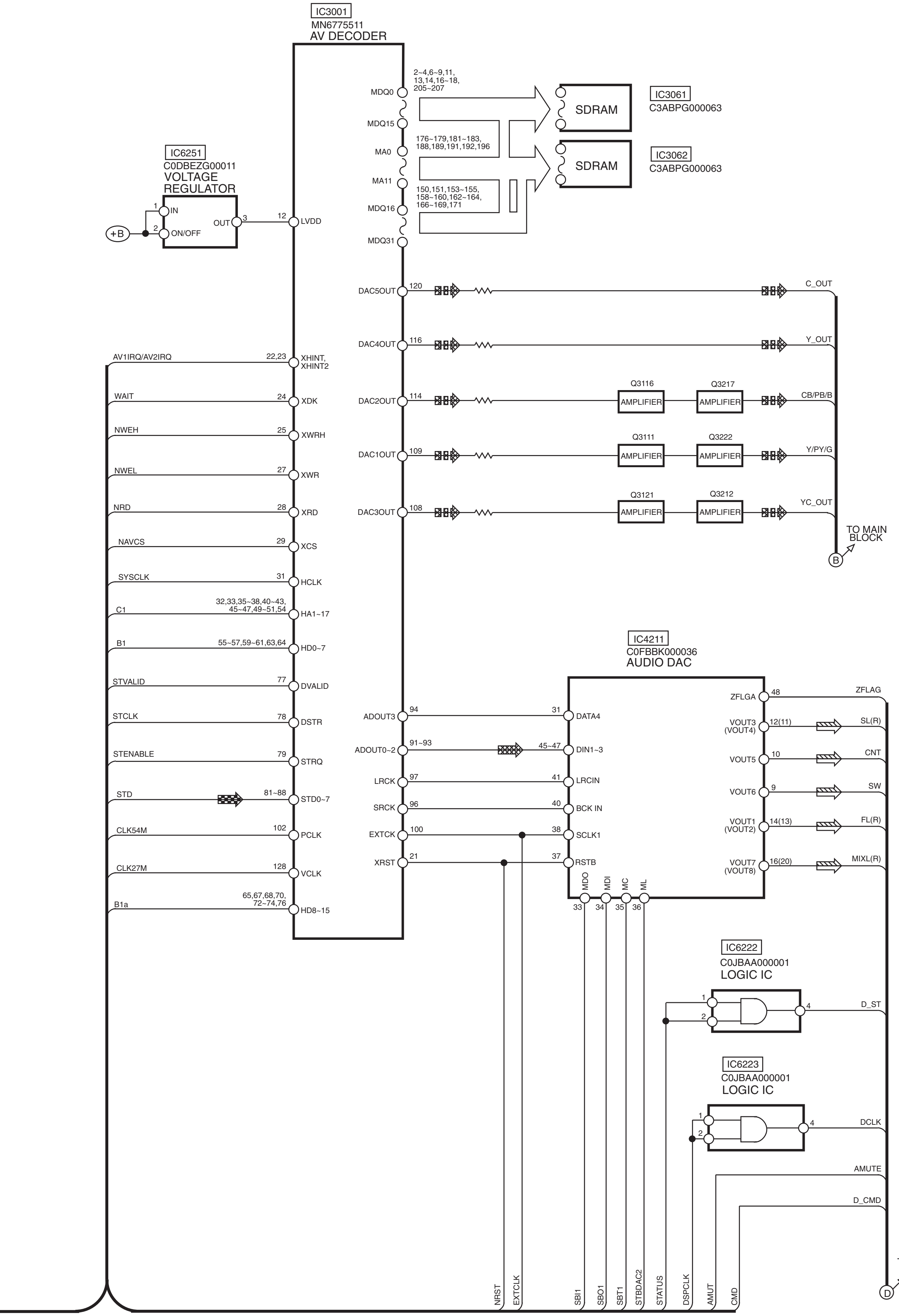

E PANEL CIRCUIT
- - - : -B SIGNAL LINE
—— : +B SIGNAL LINE
: MAIN SIGNAL LINE
FL901
A2BB00000066
F1
F2
C907 25V22
C908 25V22
C909 25V22
C910 25V22
IC901
C0HBB0000033
DISPLAY DRIVE IC
CN901B
GND
LEDB
JOGB
JOGA
SW1
SW2
SYS6V
SW3
SW4
KEY
Vss
RMT
RM+B
CS
CK
RST
DA
SW5V
FGND
FL2
-VP
FL1
TO C MAIN CIRCUIT (CN901A) ON SCHEMATIC DIAGRAM-18
D902
B0BC5R000009
D911
B0ACCK000005
D901
B0ACCK000005
C906 0.01
R911 3.3K
R912 3.3K
R913 3.3K
R902 150
R901 150
R914 22K
C911 0.1
C912 56
R915 33K
C913 56
R916 33K
C914 56
R917 33K
R918 10K
C903 120P
C902 0.01
C901 6.3V100
C904 0.01
C905 10V4.7
RESET
CS
SCK
SDATA
VSS
XOUT
XIN
VCC1
VCC2
DIG00 – DIG17
SEG00 – SEG42
-VP
CN902A
CN902B
VCC1
SYS6V
RMT
RM+B
SFC
KEY
B_SKIP
CN903A
CN903B
B_SKIP
JOGA
KEY
JOGB
SFC
C952 100P
C953 0.1
C951 100P
VR901
EVEKE2F3024M
R931 820
S932 (OPEN/CLOSE)
R932 1K
S933 (F.SKIP)
R933 1.2K
S934 (PLAY)
R934 1.5K
S935 (PAUSE)
R935 1.8K
S936 (STOP)
R936 2.2K
S937 (R.SKIP)
R940 12K
S941 (SUBWOOFER)
J VOLUME CIRCUIT
Q971
B1GBCFJN0004
LED DRIVER CONTROL
R971 470
D971
LNJ201LPQJA
RED
R961 1K
B3RAD0000035
Z901
O VDD G
C961 0.01
R937 3.3K
R938 4.7K
R939 6.8K
S931 (POWER)
S938 (SELECTOR)
S939 (RDS)
S940 (SFC)
F SENSOR CIRCUIT
H601/PW601
TO C MAIN CIRCUIT (CN601) ON SCHEMATIC DIAGRAM-18
L994
J0JBC0000019
L991 100UH
L992 100UH
L993 100UH
C992 0.012
C991 0.012
JK901
G TV/VCR INPUT CIRCUIT
JK401
TV_IN
L
R
JK402
VCR_IN
R489 8.2K
C491 100
R491 10K
C492 100
R490 8.2K
R492 10K
C493 100
R493 8.2K
R495 10K
C496 0.01
C495 0.01
C494 100
R496 10K
R494 8.2K
H402/PW402
AGND
TO C MAIN CIRCUIT (CN402) ON SCHEMATIC DIAGRAM-16

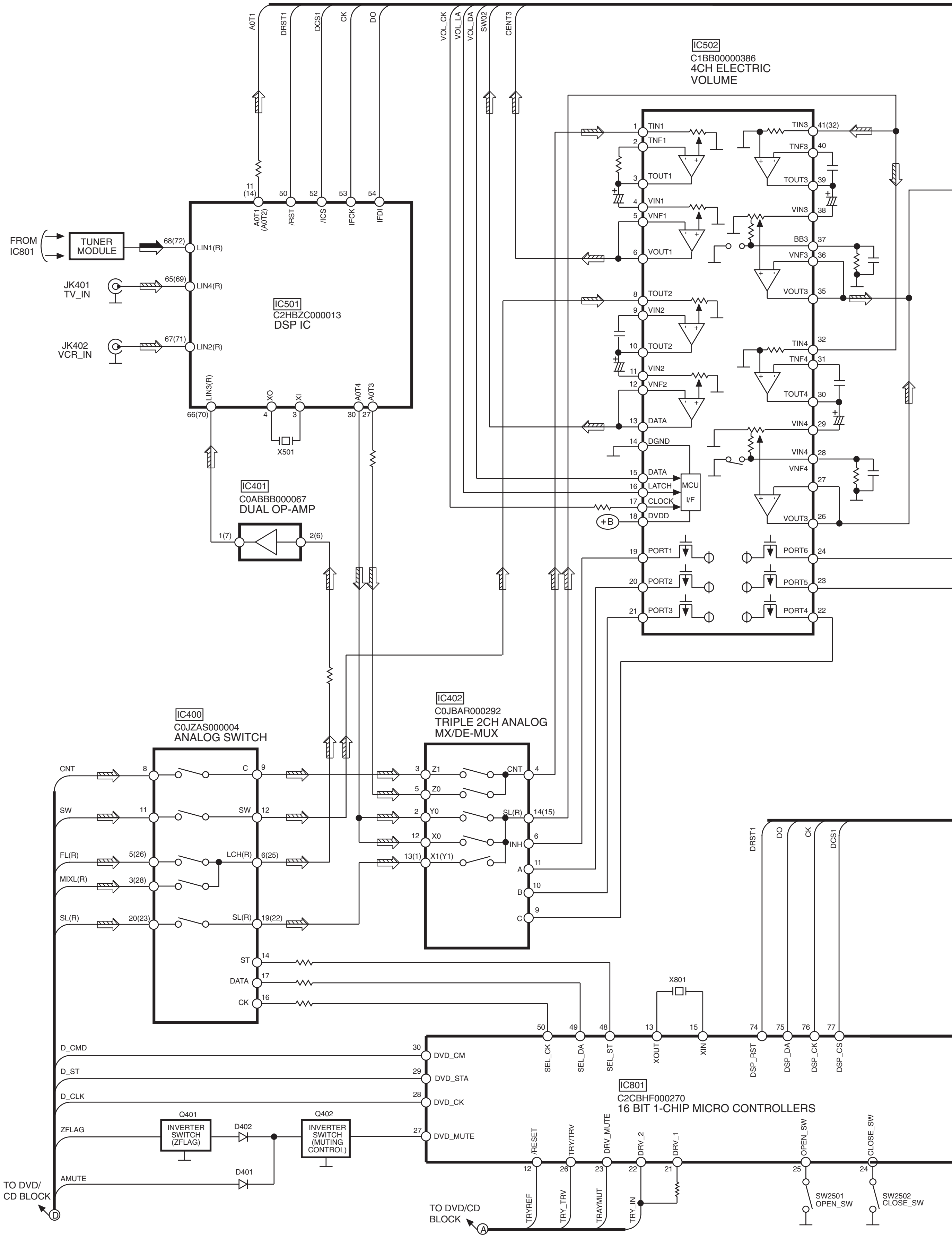

JK1001
7. 1
CN402
7. . .1
6 . 2
CN403
JK1002
20
21
2
1
CN401
26
25
2
1
CN1001
14
15
2
1
1
50
FP5201
B DVD MODULE(2) P.C.B.
FP3202
1 17
FP3203
1. 15
FP4202
1. 26
1. 11
CP101
C MAIN P.C.B.
1
2
CN901A
21
22
21
20
CN52B
1
2
2
1
JK700
24
25
To Subwoofer
CN51
1. . . 4
CP603
1. 11
1. . . 4
CN601
CP602
1. 11
F SENSOR P.C.B.
CN902B
7. . . 1
8. . . 2
PW601/H601
4. . 1
1. 11
CN603
1. 11
CN602
H BUFFER-AMP P.C.B.

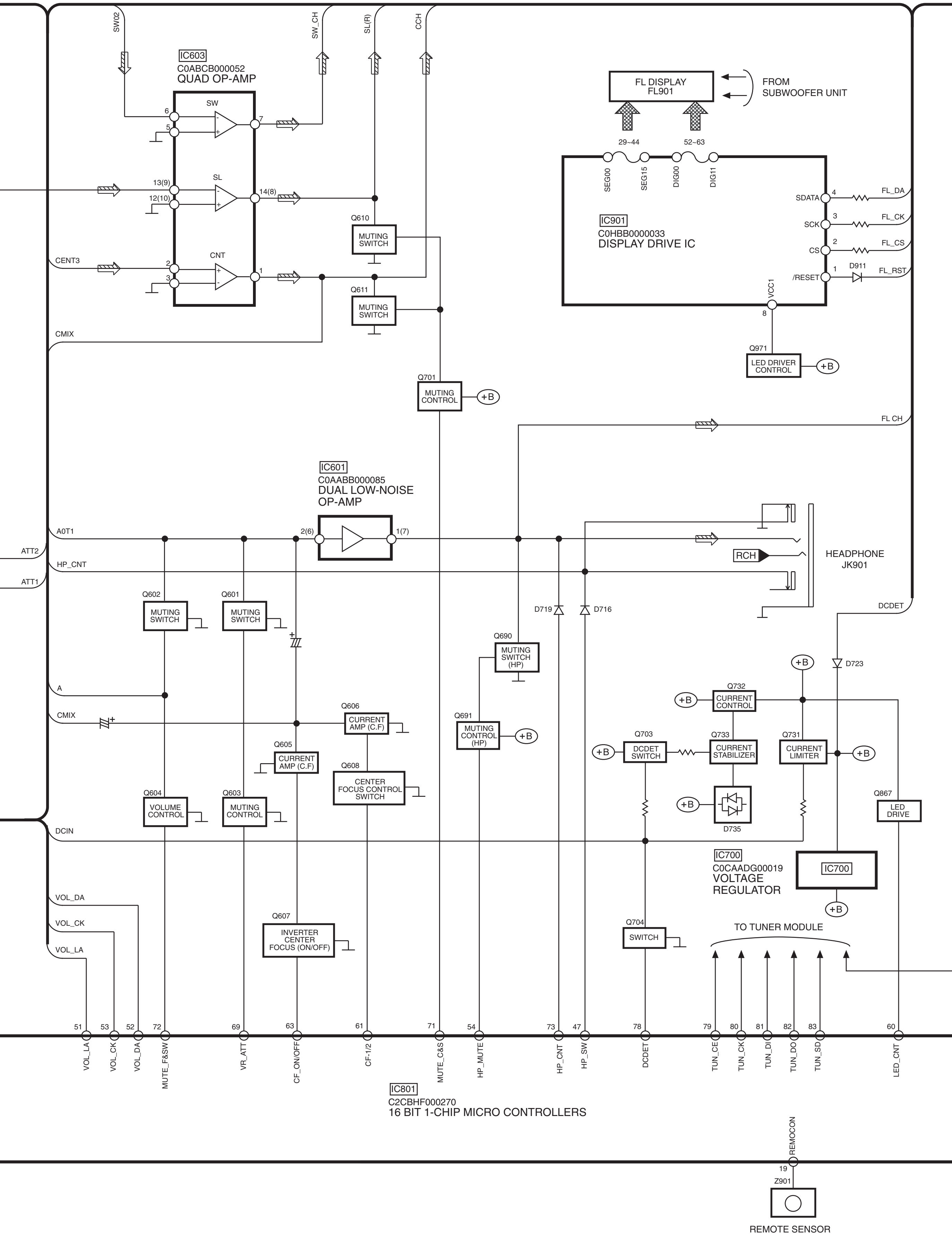

TV IN
VCR/AUX IN
JK401
JK402
PW402/H402
7
1
G TV/VCR P.C.B.
FP2503
1
7
FP5102
1
50
A DVD MODULE(1) P.C.B.
FP2501
1........15
FP5101
1..........30
Traverse Unit
MOTOR
D INTERFACE P.C.B.
1................... 11
CN405
1................... 11
CN404
Tuner Pack
OPTICAL PICKUP
E PANEL P.C.B.
CN903A
1....7
2....8
22..........2
21...........1
CN901B
CN902A
1....7
2....8
J VOLUME P.C.B.
CN903B
2....8
1....7
4...1
H11/PW11
1 2
21 20
CN52A
I POWER SUPPLY P.C.B.
CN53A
17.......1
16......2

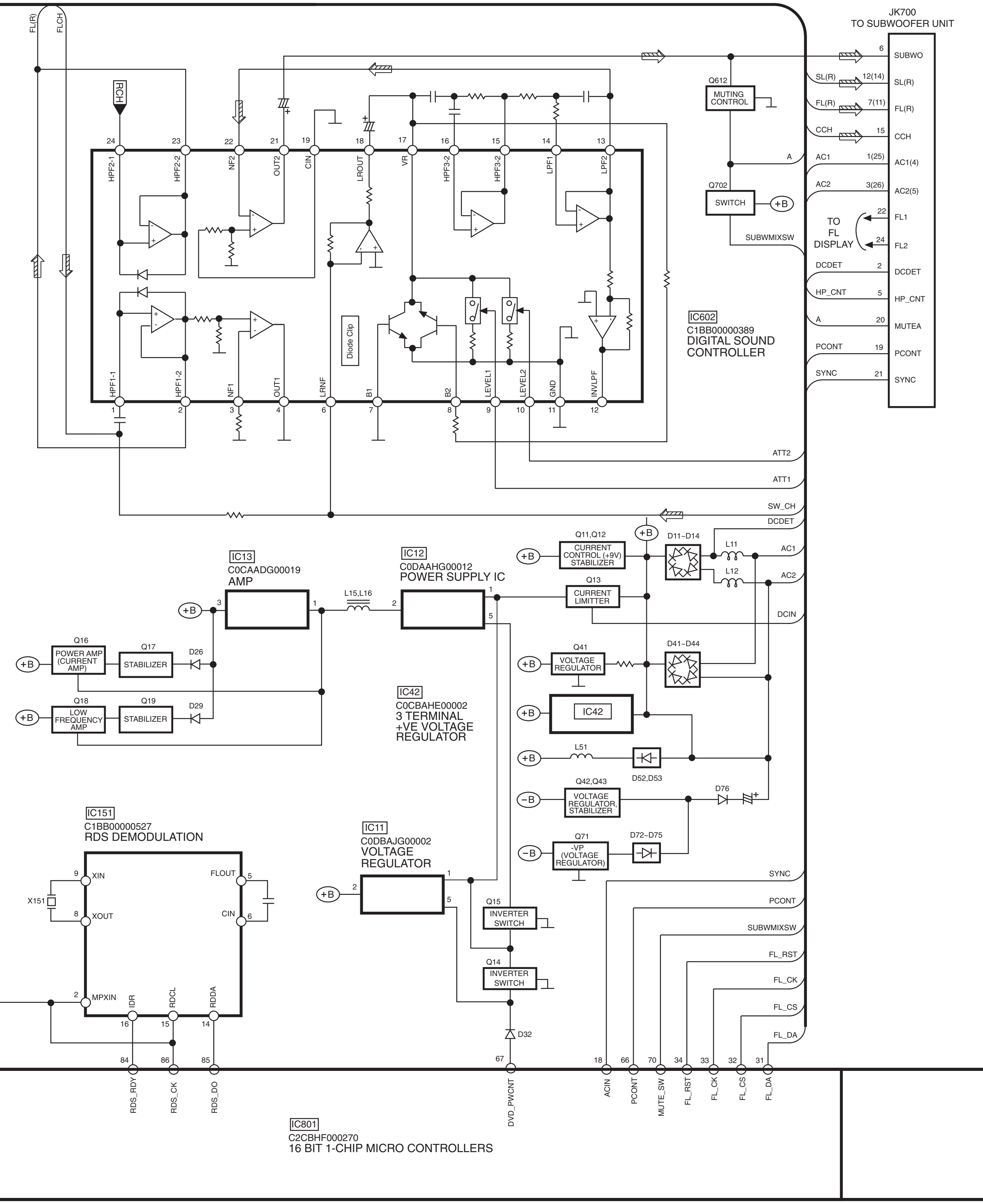

OPTICAL PICKUP UNIT
HIGH FREQUENCY MODULATOR
LD-IN 2
3.3V 3
LD-OUT 5
DVD MODULATOR
LD 15
SW 14
T2 5
T1 4
Mon 8
F2 13
F1 12
RFN 11
RFP 10
T4 7
T3 6
CD MODULATOR
LD 11
F2 10
F 8
E 6
F1 4
Mon 2
GAINH/L
LDCUR
Q5115
AUDIO FREQUENCY POWER AMP
Q5111
AUDIO FREQUENCY POWER AMP
IC5201
AN22030A-VT
FRONT END PROCESSOR
4 LPCO2
2 LPCO1
59 VIN2
58 VIN1
1 LPC1
54 VIN8
53 VIN7
47 RFINN
46 RFINP
61 VIN4
60 VIN3
51 VIN5
62 VIN9
63 VIN10
52 VIN6
3 LPC2
36 DCFLT
VHALF 15
TBAL 8
TRACKING BALANCE
TE 11
FBAL 7
FOCUS BALANCE
FE 14
SHORT 41
FLTON 35
FLTOP 34
IDGT 42
RFTE 12
RFENV 49
FS 13
DTRD 23
OFTR 21
INTERFACE
BDO 22
SEN 18
SCK 19
STDIO 20
STANDBY 17
TESTSG 43
VCC2 33
QR5221
+3.3V SUPPLY SWITCH CONTROL
+B
Q5271
SWITCH
Q6215
SWITCH RESET
IC6201
MN102H60GFD
CPU
STBDAC2 68 P71/SBIO/LCAS
CMD 51 SBI3/P83
STATUS 52 SBO3
DSPCLK 50 PB2
ADSCIRQ 76 PA0/INTRO0
NSODCCS 6 NCS1
AMUT 9 P54
NAVCS 7 NCS2
SYSCLK 18 BOSC
SBO1 72 SBO1
CPUADR 13 A0
NWORD 12
P70/SB TO/RAS 67
P56 11
NIRQ1/PA1 77
WAIT 1
NIRQ2,3/PA2,3 78,79
SBT1 70
A18~21 41,42,44,45
NCS3/P53 8
NRE 2
A1~17 14~16,26~33,35~40
P87/SB04 56
P85/SBT4 53
P55/NBRACK 10
OSCI 23
SBI1 71
NWEH 4
D0~7 84~91
NWEL 3
NCS0/P50 5
NRST 82
D8~15 93~100
IC6221
C3EBGC000033
EEPROM
5 SDA
6 SCL
IC6301
RFKFMA66F320
FLASH ROM
(SPC)
28 XOE
26 XCE
17,16, 9,10 A17~20
29,31,33,35, 38,40,42,44 DQ0~7
11 XWE
12 XRESET
30,32,34,36 39,41,43,45 DQ8~15
1~8, 18~25,48 A0~16
IC6561
C1DB00000582
CLOCK REGULATOR IC
14 FSEL
15 CLK33
CLK54M 3 CLK54
CLK27M 4 CLK27
EXTCLK 10 768fs
CLK16M 13 CLK16
8 XTO
7 XTI
X6561
IC6211
C0EBE0000070
RESET IC
4
SBI1
NWEH
B1
NWEL
B1a
C1
NRD
SBT1
AV1IRQ/AV2IRQ
WAIT
NRST

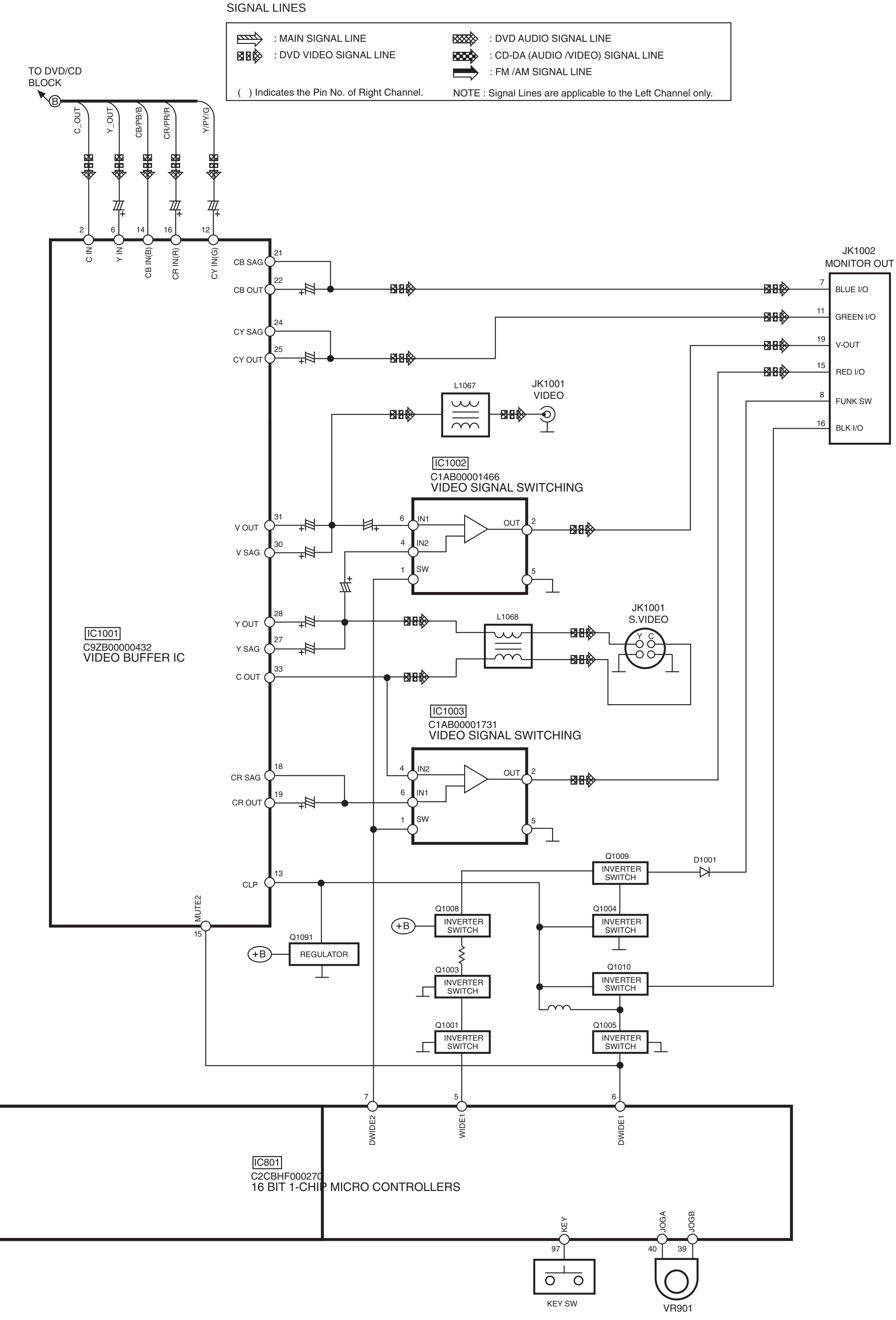

TO MAIN BLOCK
A
VHALF
GAINH/L
LDCUR
IC2001
MN103S26EGA
SODC
VHALF
TRAYMUT
TRY_IN
TY/TRV
TRYREF
Q801
SWITCH (RESET)
121 AD4
72 TILTN
106 VHALF
65 TBAL
118 AD1
66 FBAL
117 AD0
83 VFOSHORT
110 NARF
IC2101
C0JBAS000116
LOGIC IC
1 A
4 C
B 2
111 ARF
75 IDGT/TEMUTE
Q2001
CURRENT AMP
+B
96 HPFIN
98 RFDIF
120 AD3
119 AD2
74 DTRD
51 OFTR
52 BDO
55 PWM3
54 PWM2
53 PWM1
47 NRST
82 TSTSG
IC6253
C0DBCGE00002
VOLTAGE REGULATOR
3 OUT
IN 1
ON/OFF 2
+B
2 NINT1
6 WAITODC
5 NINT2
35 NWR
136 DA2
149,151,158, 160,164,166, 168,172 HDD8~15
36 NRD
NCS 34
OSCI1 79
TRSCRV 67
DAC0 114
DAC1 115
TIL T 71
TILTP 70
FG 69
SPDRV 68
VDD18 18
PWM5 61
CPUADP0 30
CPUDT0~7 37~44
CPUADR~17 9~17,22~29
INTRO 141
MASTER 176
1 BIAS1
20 MUTE4
24 LDIN
28 LDCNT
25 BIAS2
4 OPIN+
5 OPIN-
23 VIN3
2 VIN1
3 VIN2
9 MUTE12
27 MUTE3
IC2521
C0GBG0000033
MOTOR DRIVE IC
V02+ 12
V02- 11
V01+ 14
V01- 13
V03- 18
V03+ 17
V04+ 15
V04- 16
M
M2501
+
-
OPTICAL PICK UP UNIT
ACTUATOR
FOCUS COIL
TRACKING COIL
ACT F+
ACT F-
ACT T+
ACT T-
TURNTABLE
IC2501
C0GBF0000004
MOTOR DRIVE IC
21 ECR
23 PS
24 FG
22 EC
H3- 14
H3+ 13
H2- 12
H2+ 11
H1- 10
H1+ 9
A1 7
A2 4
A3 2
HALL3
HALL2
HALL1
IC6252
C0DBFFG00004
VOLTAGE REGULATOR
3 OUT
IN 1
ON/OFF 2
+B
D2001
SW2601
ADSCIRQ
NWEL
STCLK
STD
NRD
NSODCCS
CLK16M
STENABLE
STVALID
C1
B1
CPUADR


IC3001
MN6775511
AV DECODER
2~4,6~9,11,
13,14,16~18,
205~207
MDQ0
MDQ15
176~179,181~183,
188,189,191,192,196
MA0
MA11
150,151,153~155,
158~160,162~164,
166~169,171
MDQ16
MDQ31
SDRAM
IC3061
C3ABPG000063
SDRAM
IC3062
C3ABPG000063
IC6251
C0DBEZG00011
VOLTAGE
REGULATOR
1
IN
2
ON/OFF
OUT
3
+B
12
LVDD
DAC5OUT
120
C_OUT
DAC4OUT
116
Y_OUT
DAC2OUT
114
Q3116
AMPLIFIER
Q3217
AMPLIFIER
CB/PB/B
DAC1OUT
109
Q3111
AMPLIFIER
Q3222
AMPLIFIER
Y/PY/G
DAC3OUT
108
Q3121
AMPLIFIER
Q3212
AMPLIFIER
YC_OUT
TO MAIN
BLOCK
B
AV1IRQ/AV2IRQ
22,23
XHINT,
XHINT2
WAIT
24
XDK
NWEH
25
XWRH
NWEL
27
XWR
NRD
28
XRD
NAVCS
29
XCS
SYSCLK
31
HCLK
C1
32,33,35~38,40~43,
45~47,49~51,54
HA1~17
B1
55~57,59~61,63,64
HD0~7
STVALID
77
DVALID
STCLK
78
DSTR
STENABLE
79
STRQ
STD
81~88
STD0~7
CLK54M
102
PCLK
CLK27M
128
VCLK
B1a
65,67,68,70,
72~74,76
HD8~15
IC4211
C0FBBK000036
AUDIO DAC
ADOUT3
94
31
DATA4
ADOUT0~2
91~93
45~47
DIN1~3
LRCK
97
41
LRCIN
SRCK
96
40
BCK IN
EXTCK
100
38
SCLK1
XRST
21
37
RSTB
MDO
MDI
MC
ML
33
34
35
36
ZFLGA
48
ZFLAG
VOUT3
(VOUT4)
12(11)
SL(R)
VOUT5
10
CNT
VOUT6
9
SW
VOUT1
(VOUT2)
14(13)
FL(R)
VOUT7
(VOUT8)
16(20)
MIXL(R)
IC6222
C0JBAA000001
LOGIC IC
1
2
4
D_ST
IC6223
C0JBAA000001
LOGIC IC
1
2
4
DCLK
AMUTE
D_CMD
TO MAIN
BLOCK
D
NRST
EXTCLK
SBI1
SBO1
SBT1
STBDAC2
STATUS
DSPCLK
AMUT
CMD


A0T1
DRST1
DCS1
CK
DO
VOL_CK
VOL_LA
VOL_DA
SW02
CENT3
IC502
C1BB00000386
4CH ELECTRIC VOLUME
TIN1
TNF1
TOUT1
VIN1
VNF1
VOUT1
TOUT2
VIN2
TOUT2
VIN2
VNF2
DATA
DGND
DATA
LATCH
CLOCK
DVDD
MCU I/F
+B
PORT1
PORT2
PORT3
TIN3
TNF3
TOUT3
VIN3
BB3
VNF3
VOUT3
TIN4
TNF4
TOUT4
VIN4
VIN4
VNF4
VOUT3
PORT6
PORT5
PORT4
41(32)
FROM IC801
TUNER MODULE
68(72)
LIN1(R)
JK401 TV_IN
65(69)
LIN4(R)
JK402 VCR_IN
67(71)
LIN2(R)
IC501
C2HBZC000013
DSP IC
A0T1 (A0T2)
/RST
/ICS
IFCK
IFDI
11 (14)
LIN3(R)
66(70)
XO
XI
X501
A0T4
A0T3
IC401
C0ABBB000067
DUAL OP-AMP
1(7)
2(6)
IC400
C0JZAS000004
ANALOG SWITCH
CNT
SW
FL(R)
MIXL(R)
SL(R)
C
SW
LCH(R)
SL(R)
5(26)
3(28)
20(23)
6(25)
19(22)
ST
DATA
CK
IC402
C0JBAR000292
TRIPLE 2CH ANALOG MX/DE-MUX
Z1
Z0
Y0
X0
X1(Y1)
13(1)
CNT
SL(R)
14(15)
INH
A
B
C
X801
IC801
C2CBHF000270
16 BIT 1-CHIP MICRO CONTROLLERS
SEL_CK
SEL_DA
SEL_ST
XOUT
XIN
DSP_RST
DSP_DA
DSP_CK
DSP_CS
D_CMD
D_ST
D_CLK
ZFLAG
AMUTE
DVD_CM
DVD_STA
DVD_CK
DVD_MUTE
Q401
INVERTER SWITCH (ZFLAG)
D402
Q402
INVERTER SWITCH (MUTING CONTROL)
D401
/RESET
TRY/TRV
DRV_MUTE
DRV_2
DRV_1
OPEN_SW
CLOSE_SW
TRYREF
TRY_TRV
TRAYMUT
TRY_IN
SW2501 OPEN_SW
SW2502 CLOSE_SW
TO DVD/ CD BLOCK
D
TO DVD/CD BLOCK
A

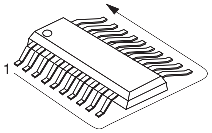

SW02
SW_CH
SL(R)
CCH
IC603
C0ABCB000052
QUAD OP-AMP
SW
6
5
7
SL
13(9)
12(10)
14(8)
CENT3
CNT
2
3
1
CMIX
Q610
MUTING SWITCH
Q611
MUTING SWITCH
Q701
MUTING CONTROL
+B
FL DISPLAY
FL901
FROM
SUBWOOFER UNIT
29~44
52~63
SEG00
SEG15
DIG00
DIG11
SDATA
4
FL_DA
SCK
3
FL_CK
CS
2
FL_CS
/RESET
1
D911
FL_RST
IC901
C0HBB0000033
DISPLAY DRIVE IC
VCC1
8
Q971
LED DRIVER CONTROL
+B
FL CH
IC601
C0AABB000085
DUAL LOW-NOISE
OP-AMP
A0T1
2(6)
1(7)
ATT2
HP_CNT
ATT1
RCH
HEADPHONE
JK901
Q602
MUTING SWITCH
Q601
MUTING SWITCH
D719
D716
DCDET
Q690
MUTING SWITCH (HP)
A
CMIX
Q606
CURRENT AMP (C.F)
Q691
MUTING CONTROL (HP)
+B
Q605
CURRENT AMP (C.F)
Q608
CENTER FOCUS CONTROL SWITCH
+B
D723
Q732
+B
CURRENT CONTROL
Q703
Q733
Q731
+B
DCDET SWITCH
CURRENT STABILIZER
CURRENT LIMITER
+B
+B
D735
Q867
LED DRIVE
Q604
VOLUME CONTROL
Q603
MUTING CONTROL
DCIN
IC700
C0CAADG00019
VOLTAGE
REGULATOR
IC700
+B
VOL_DA
VOL_CK
VOL_LA
Q607
INVERTER CENTER FOCUS (ON/OFF)
Q704
SWITCH
TO TUNER MODULE
51
53
52
72
69
63
61
71
54
73
47
78
79
80
81
82
83
60
VOL_LA
VOL_CK
VOL_DA
MUTE_F&SW
VR_ATT
CF_ON/OFF
CF-1/2
MUTE_C&S
HP_MUTE
HP_CNT
HP_SW
DCDET
TUN_CE
TUN_CK
TUN_DI
TUN_DO
TUN_SD
LED_CNT
IC801
C2CBHF000270
16 BIT 1-CHIP MICRO CONTROLLERS
REMOCON
19
Z901
REMOTE SENSOR


JK700
TO SUBWOOFER UNIT
FL(R)
FLCH
RCH
SUBWO
SL(R)
12(14)
FL(R)
7(11)
CCH
15
AC1
1(25)
AC1(4)
AC2
3(26)
AC2(5)
TO
FL
DISPLAY
22
FL1
24
FL2
DCDET
2
HP_CNT
5
A
20
MUTEA
PCONT
19
SYNC
21
Q612
MUTING
CONTROL
Q702
SWITCH
+B
SUBWMIXSW
24
23
22
21
19
18
17
16
15
14
13
HPF2-1
HPF2-2
NF2
OUT2
CIN
LROUT
VR
HPF3-2
HPF3-2
LPF1
LPF2
Diode Clip
HPF1-1
HPF1-2
NF1
OUT1
LRNF
B1
B2
LEVEL1
LEVEL2
GND
INVLPF
1
2
3
4
6
7
8
9
10
11
12
IC602
C1BB00000389
DIGITAL SOUND
CONTROLLER
ATT2
ATT1
SW_CH
DCDET
Q11,Q12
CURRENT
CONTROL (+9V)
STABILIZER
D11~D14
L11
L12
AC1
AC2
Q13
CURRENT
LIMITTER
DCIN
IC13
C0CAADG00019
AMP
IC12
C0DAAHG00012
POWER SUPPLY IC
L15,L16
Q16
POWER AMP
(CURRENT
AMP)
Q17
STABILIZER
D26
Q18
LOW
FREQUENCY
AMP
Q19
STABILIZER
D29
Q41
VOLTAGE
REGULATOR
D41~D44
IC42
C0CBAHE00002
3 TERMINAL
+VE VOLTAGE
REGULATOR
L51
D52,D53
Q42,Q43
–B
VOLTAGE
REGULATOR,
STABILIZER
D76
Q71
-VP
(VOLTAGE
REGULATOR)
D72~D75
IC151
C1BB00000527
RDS DEMODULATION
9
XIN
FLOUT
5
X151
8
XOUT
CIN
6
2
MPXIN
IDR
RDCL
RDDA
16
15
14
IC11
C0DBAJG00002
VOLTAGE
REGULATOR
Q15
INVERTER
SWITCH
Q14
INVERTER
SWITCH
D32
SYNC
PCONT
SUBWMIXSW
FL_RST
FL_CK
FL_CS
FL_DA
84
86
85
67
18
66
70
34
33
32
31
RDS_RDY
RDS_CK
RDS_DO
DVD_PWCNT
ACIN
PCONT
MUTE_SW
FL_RST
FL_CK
FL_CS
FL_DA
IC801
C2CBHF000270
16 BIT 1-CHIP MICRO CONTROLLERS

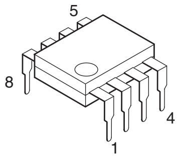

SIGNAL LINES
: MAIN SIGNAL LINE
: DVD VIDEO SIGNAL LINE
: DVD AUDIO SIGNAL LINE
: CD-DA (AUDIO /VIDEO) SIGNAL LINE
: FM /AM SIGNAL LINE
( ) Indicates the Pin No. of Right Channel.
NOTE : Signal Lines are applicable to the Left Channel only.
TO DVD/CD BLOCK
B
C_OUT
Y_OUT
CB/PB/B
CR/PR/R
Y/PY/G
2
6
14
16
12
C IN
Y IN
CB IN(B)
CR IN(R)
CY IN(G)
21 CB SAG
22 CB OUT
24 CY SAG
25 CY OUT
31 V OUT
30 V SAG
28 Y OUT
27 Y SAG
33 C OUT
18 CR SAG
19 CR OUT
13 CLP
MUTE2
15
IC1001
C9ZB00000432
VIDEO BUFFER IC
JK1002
MONITOR OUT
7 BLUE I/O
11 GREEN I/O
19 V-OUT
15 RED I/O
8 FUNK SW
16 BLK I/O
L1067
JK1001
VIDEO
IC1002
C1AB00001466
VIDEO SIGNAL SWITCHING
6 IN1
4 IN2
1 SW
OUT 2
5
L1068
JK1001
S.VIDEO
Y C
IC1003
C1AB00001731
VIDEO SIGNAL SWITCHING
4 IN2
6 IN1
1 SW
OUT 2
5
Q1009
INVERTER SWITCH
D1001
Q1008
INVERTER SWITCH
+B
Q1004
INVERTER SWITCH
Q1091
REGULATOR
+B
Q1003
INVERTER SWITCH
Q1010
INVERTER SWITCH
Q1001
INVERTER SWITCH
Q1005
INVERTER SWITCH
7 DWIDE2
5 WIDE1
6 DWIDE1
IC801
C2CBHF000270
16 BIT 1-CHIP MICRO CONTROLLERS
KEY
97
JOGA
JOGB
40
39
KEY SW
VR901

C0JBAR000292 (16p)
C1DB00000582 (16p)
C3ABPG000063 (54p)
C1BB00000527 (16p)
C1BB00000389 (24p)
C1BB00000386 (42p)
C0GBF0000004 (16p)
C9ZB00000432 (34p)

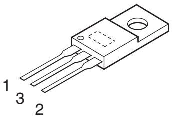
C0JZAS000004 (30p)



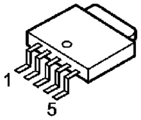
C0AABB000085



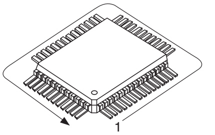
C0CAADG00019



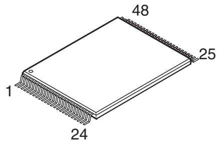
C0DBAJG00002
C0DBFFG00004
C0DBCGE00002
C0DBEZG00011



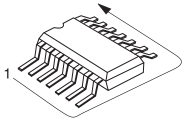
C2HBZC000013 (80p)
MN103S26EGA (176p)
C0FBBK000036 (48p)
MN102H60GFD (100p)
C0HBB0000033 (64p)
AN22030A-VT (64p)
MN6775511 (208p)
C2CBHF000270 (100p)



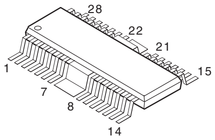
RFKFMA66F160



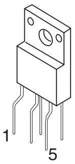
C3EBGC000033 (8p)



C0GBG0000033


28
22
21
1
15
7
8
14

C0DAAHG00012



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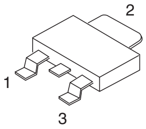

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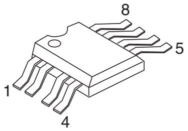

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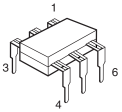

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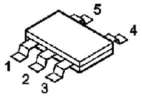

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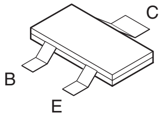

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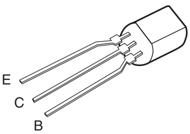

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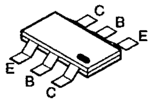

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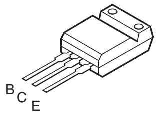

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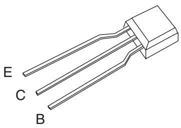

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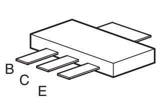

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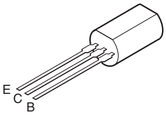

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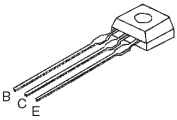

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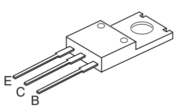

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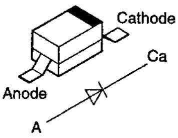
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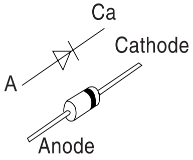
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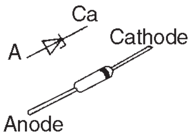
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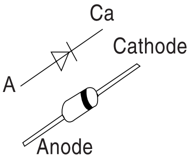
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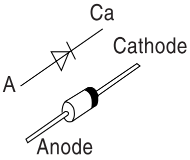
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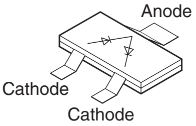
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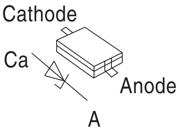
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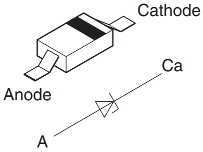
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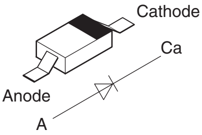
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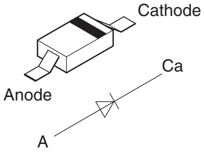
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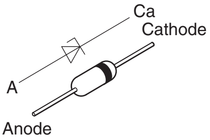
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Anode

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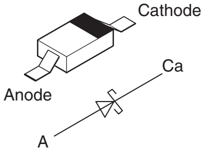
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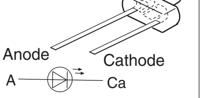

Anode
Cathode
A
Ca

■ Discs that can be played

Disc type	Logo	Indication used in instructions
DVD-RAM	DVD RAM RAM4.7	RAM
DVD-Audio	DVD AUDIO	DVD-A
DVD-Video	DVD VIDEO DVD VIDEO	DVD-V
DVD-R	DVD R R4.7	
Video CD	COMPACT disc DIGITAL VIDEO	VCD
CD	COMPACT disc DIGITAL AUDIO COMPACT disc DIGITAL AUDIO TEXT	CD Including CD text
CD-R/RW	—	WMA MP3

- Use discs with the above logos and that conform to specifications. The unit cannot play other discs correctly.
- Do not use irregularly shaped discs (e.g. heart-shaped), as these can damage the unit.

■ Discs that cannot be played

DVD-ROM, CD-ROM, CDV, CD-G, +RW, DVD-RW, CVD, SVCD, SACD, Divx Video Discs and Photo CD.

■ Disc structure

Disc structure and the labels given to the items on discs depend on the disc type.

Track:	the smallest division on DVD-Audio, CDs and Video CDs, or a single WMA/MP3 file.
Chapter:	the smallest division on DVD-Video.
Group:	collections of tracks on DVD-Audio and equivalent to folders or albums on data discs.
Title:	the largest division on DVD-Video, usually an entire movie.
Program:	the division on DVD-RAM equivalent to a single recording.
Play list:	a group of scenes on DVD-RAM.
Scene:	DVD-RAM program sections specified and grouped into play lists on a DVD video recorder.

Playing DVDs and Video CDs

The producer of these discs can control how they are played so you may not always be able to control play as described in these operating instructions (for example if the play time is not displayed or if a Video CD has menus). Read the disc's instructions carefully.

■ CD-R and CD-RW discs

This unit can play CD-R/RW (audio recording disc) recorded with CD-DA, video CD, WMA or MP3. Finalize※ the disc after recording.

■ DVD-R discs

Panasonic DVD-R recorded and finalized※ on a Panasonic DVD video recorder are played as DVD-Video on this unit.

※A process that allows play on compatible equipment.

■ DVD-RAM discs

DVD-RAM discs must meet the following conditions for this unit to be able to play them.

Type	●Non-cartridge discs ●Discs that can be removed from their cartridges (TYPE 2 and 4)
Capacity	●12 cm 9.4 GB (double-sided) and 4.7 GB (single-sided) ●8 cm 2.8 GB (double-sided)
Recording format	Discs recorded with DVD video recorders, DVD video cameras, personal computers, etc., using Version 1.1 of the Video Recording Format (a unified video recording standard).

- Remove TYPE 2 and 4 discs from their cartridges before use, then return them when you are finished. Read the instructions for the disc carefully.
- Do not allow the disc to become dirty or scratched. Store discs in their cartridges and ensure the disc label and cartridge label face the same way.
- Some parts of the disc, for example where one program ends and another begins, may not play smoothly.

Note

It may not be possible to play CD-R, CD-RW, DVD-R and DVD-RAM in all cases due to the type of disc or condition of the recording.

■ Video systems

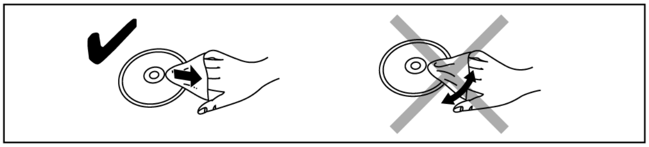
This unit can play both the PAL and NTSC video systems. To view PAL or NTSC, however, your television must match the system used on the disc.

PAL discs cannot be correctly viewed on an NTSC television. NTSC can be correctly viewed on a PAL television by converting the video signal to PAL 60 (➡ page 31, Video—NTSC Disc Output).

■ To clean discs

DVD-Audio, DVD-Video, Video CD, CD

Wipe with a damp cloth and then wipe dry.



DVD-RAM, DVD-R

- Clean with an optional DVD-RAM/PD disc cleaner (LF-K200DCA1, where available).
- Never use cloths or cleaners for CDs etc.

■ Handling precautions

- Do not write on the label side with a ball-point pen or other writing instrument.
- Do not use record cleaning sprays, benzine, thinner, static electricity prevention liquids or any other solvent.
- Do not attach labels or stickers to discs. (Do not use discs with exposed adhesive from tape or left over peeled-off stickers.)
- Do not use scratch-proof protectors or covers.
- Do not use discs printed with label printers available on the market.

WMA, MP3, and CD text information

- Discs must conform to ISO9660 level 1 or 2 (except for extended formats).
- This unit is compatible with multi-session but if there are a lot of sessions it takes more time for play to start. Keep the number of sessions to a minimum to avoid this.
- The order tracks appear in the menus may differ to the order shown on your computer.

WMA

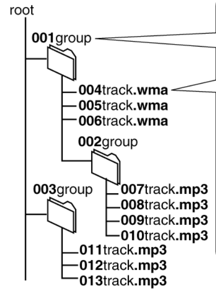
- Noise may occur when playing WMA files.
- You cannot play WMA files that are copy protected.

MP3

- This unit is not compatible with ID3 tags.
- If you play an MP3 track that includes still picture data, it will take some time before the music itself starts playing and the elapsed time will not be displayed during this time. Even after the track starts, the correct play time will not be displayed.

Order of play

WMA **MP3**



Naming folders and files

Prefix folder and file names with 3-digit numbers in the order you want to play them.

Extension

004track.wma (or .WMA)

The extension for MP3 is **".mp3"** or **".MP3"**.

CD (CD text only)

When making your own CD text discs

The unit plays the tracks in the order you record them so you do not have to prefix the titles with numbers.

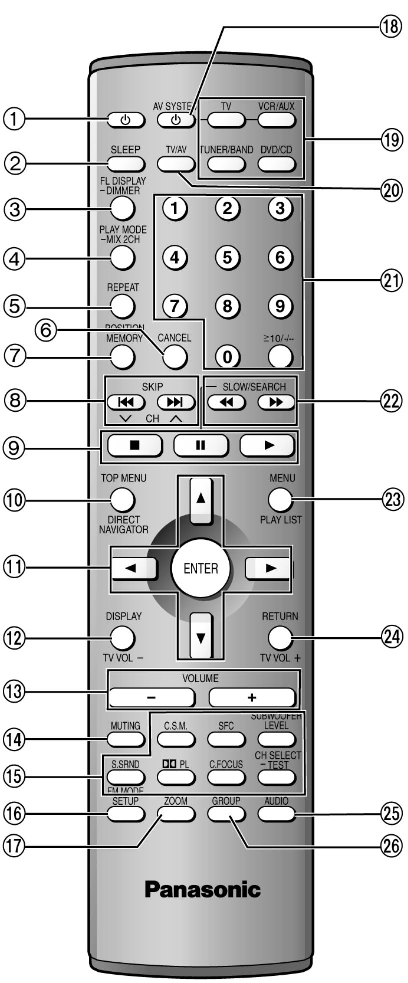
Windows Media, and the Windows logo are trademarks, or registered trademarks of Microsoft Corporation in the United States and/or other countries.

WMA is a compression format developed by Microsoft Corporation. It achieves the same sound quality as MP3 with a file size that is smaller than that of MP3.

MPEG Layer-3 audio decoding technology licensed from Fraunhofer IIS and Thomson multimedia.

Manufactured under license from Dolby Laboratories.
"Dolby", "Pro Logic" and the double-D symbol are trademarks of Dolby Laboratories.

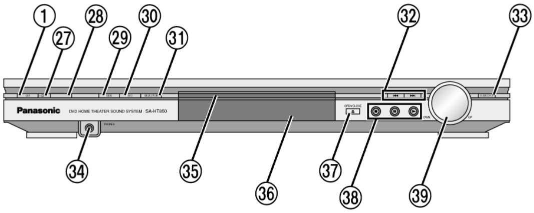
Manufactured under license from Digital Theater Systems, Inc. US Pat. No. 5,451,942, 5,956,674, 5,974,380, 5,978,762 and other world-wide patents issued and pending. "DTS" and "DTS Digital Surround" are registered trademarks of Digital Theater Systems, Inc. © 1996, 2000 Digital Theater Systems, Inc. All rights reserved.



⑱
①
AV SYSTEM
TV
VCR/AUX
⑲
②
SLEEP
TV/AV
TUNER/BAND
DVD/CD
FL DISPLAY –DIMMER
⑳
③
1
2
3
PLAY MODE –MIX 2CH
④
4
5
6
㉑
REPEAT
⑤
7
8
9
⑥
POSITION MEMORY
CANCEL
≧10/-/--
⑦
0
SKIP
SLOW/SEARCH
⑧
∨ CH ∧
㉒
⑨
TOP MENU
MENU
⑩
DIRECT NAVIGATOR
PLAY LIST
㉓
⑪
ENTER
DISPLAY
RETURN
⑫
TV VOL –
TV VOL +
㉔
VOLUME
⑬
–
+
MUTING
C.S.M.
SFC
SUBWOOFER LEVEL
⑭
S.SRND
PL
C.FOCUS
CH SELECT –TEST
⑮
FM MODE SETUP
ZOOM
GROUP
AUDIO
⑯
㉕
⑰
㉖
Panasonic

Remote control

① **Standby/on switch [⏻]**
② **Sleep button [SLEEP]**
③ **FL display, Dimmer button [FL DISPLAY, –DIMMER]**
④ **Play mode, Mix 2ch button**
[PLAY MODE, –MIX 2CH]
⑤ **Repeat button [REPEAT]**
⑥ **Cancel button [CANCEL]**
⑦ **Position memory button [POSITION MEMORY]**
⑧ **Skip, Preset channel, TV channel buttons**
[|◀◀ ▶▶|, SKIP, ∨ CH ∧]
⑨ **Basic operation buttons**
⑩ **Top menu, Direct navigator button**
[TOP MENU, DIRECT NAVIGATOR]
⑪ **Cursor buttons [▲, ▼, ◀, ▶], Enter button [ENTER]**
⑫ **Display, TV volume down button**
[DISPLAY, TV VOL−]
⑬ **Volume buttons [−, +, VOLUME]**
⑭ **Muting button [MUTING]**
⑮ **Sound field, sound quality buttons**
⑯ **FM mode, Setup button [FM MODE, SETUP]**
⑰ **Zoom button [ZOOM]**
⑱ **AV system standby/on button [⏻, AV SYSTEM]**
⑲ **Source select buttons**
●Face towards this unit to change the source.
●Press [TV] or [VCR/AUX] first to operate a Panasonic television or video cassette recorder.
⑳ **TV/AV button [TV/AV]**
㉑ **Numbered buttons [1–9, 0, ≧10/-/--]**
㉒ **Slow/search, Tuning buttons**
[◀◀, ▶▶ SLOW/SEARCH]
㉓ **Menu, Play list button [MENU, PLAY LIST]**
㉔ **Return, TV volume up button [RETURN, TV VOL+]**
㉕ **Audio button [AUDIO]**
㉖ **Group button [GROUP]**



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㉝
Panasonic
DVD HOME THEATER SOUND SYSTEM SA-HT850
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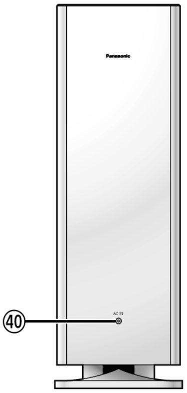
㊴

Main unit

① **Standby/on switch [⏻/I]**
Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.
㉗ **Standby/on indicator**
When the unit is connected to the AC mains supply, this indicator lights up in standby mode and goes out when the unit is turned on.
㉘ **Remote control signal sensor**
㉙ **RDS button [RDS]**
㉚ **SFC button [SFC]**
㉛ **Source select button [SELECTOR]**
DVD/CD→FM→AM→TV→VCR/AUX
㉜ **Skip, Preset channel buttons [|◀◀ ▶▶|]**
㉝ **Subwoofer level button [SUBWOOFER]**
㉞ **Headphone jack [PHONES]**
㉟ **Disc tray**
㊱ **Display**
㊲ **Open/close button [⏏, OPEN/CLOSE]**
㊳ **Basic operation buttons**
㊴ **Volume control [VOLUME, DOWN, UP]**



Panasonic
㊵
AC IN

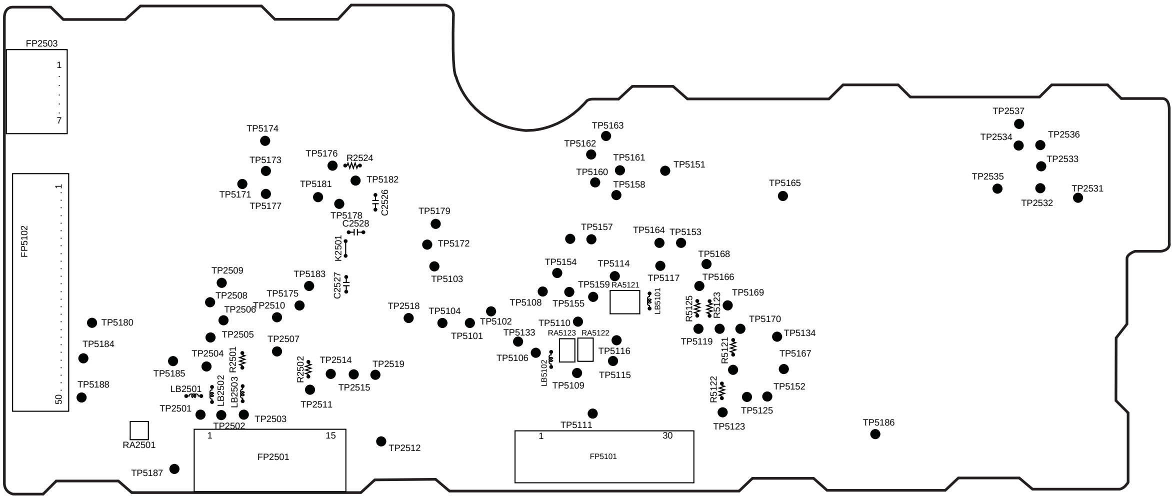
Subwoofer

㊵ **AC supply indicator [AC IN]**
This indicator lights when the unit is connected to the AC mains supply.

A B C D E F G

1 2 3 4 5 6 7 8 9

A DVD MODULE(1) P.C.B (REP3422B)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FP5102
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50
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TP5173
TP5171
TP5177
TP5176
R2524
TP5182
TP5181
TP5178
C2526
C2528
K2501
C2527
TP5183
TP5175
TP5179
TP5172
TP5103
TP2509
TP2508
TP2506
TP2510
TP2505
TP2507
TP2504
R2501
TP5185
LB2501
LB2502
LB2503
TP2501
TP2502
TP2503
R2502
TP2514
TP2515
TP2519
TP2511
TP5180
TP5184
TP5188
RA2501
TP5187
FP2501
1
15
TP2512
TP2518
TP5104
TP5101
TP5102
TP5133
TP5106
LB5102
TP5109
TP5110
RA5123
RA5122
TP5116
TP5115
TP5111
FP5101
1
30
TP5163
TP5162
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R5121
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TP5152
TP5125
TP5123
TP5186
TP5165
TP2537
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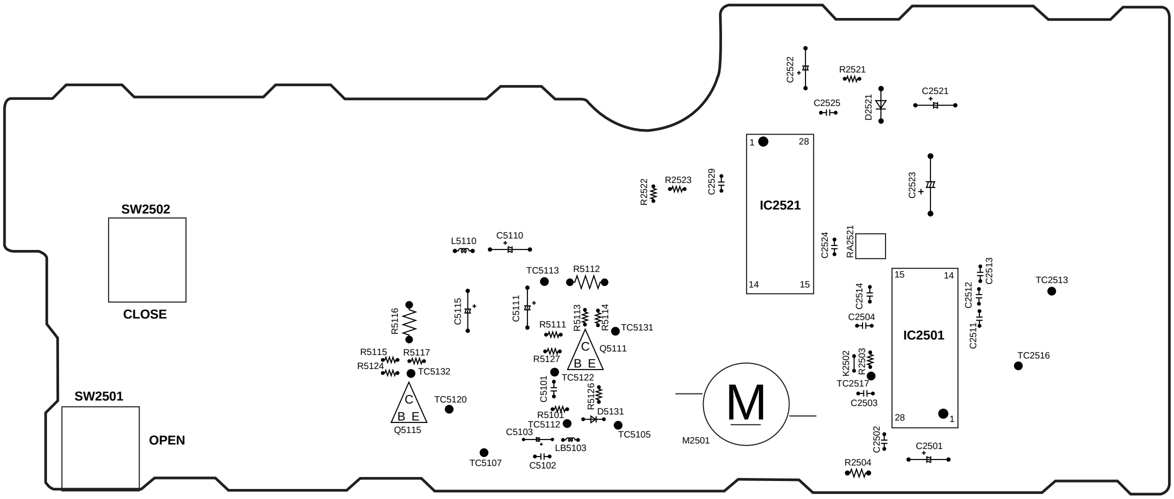
TP2531

(SIDE : A)

A DVD MODULE(1) P.C.B (REP3422B)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R2522
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C2529
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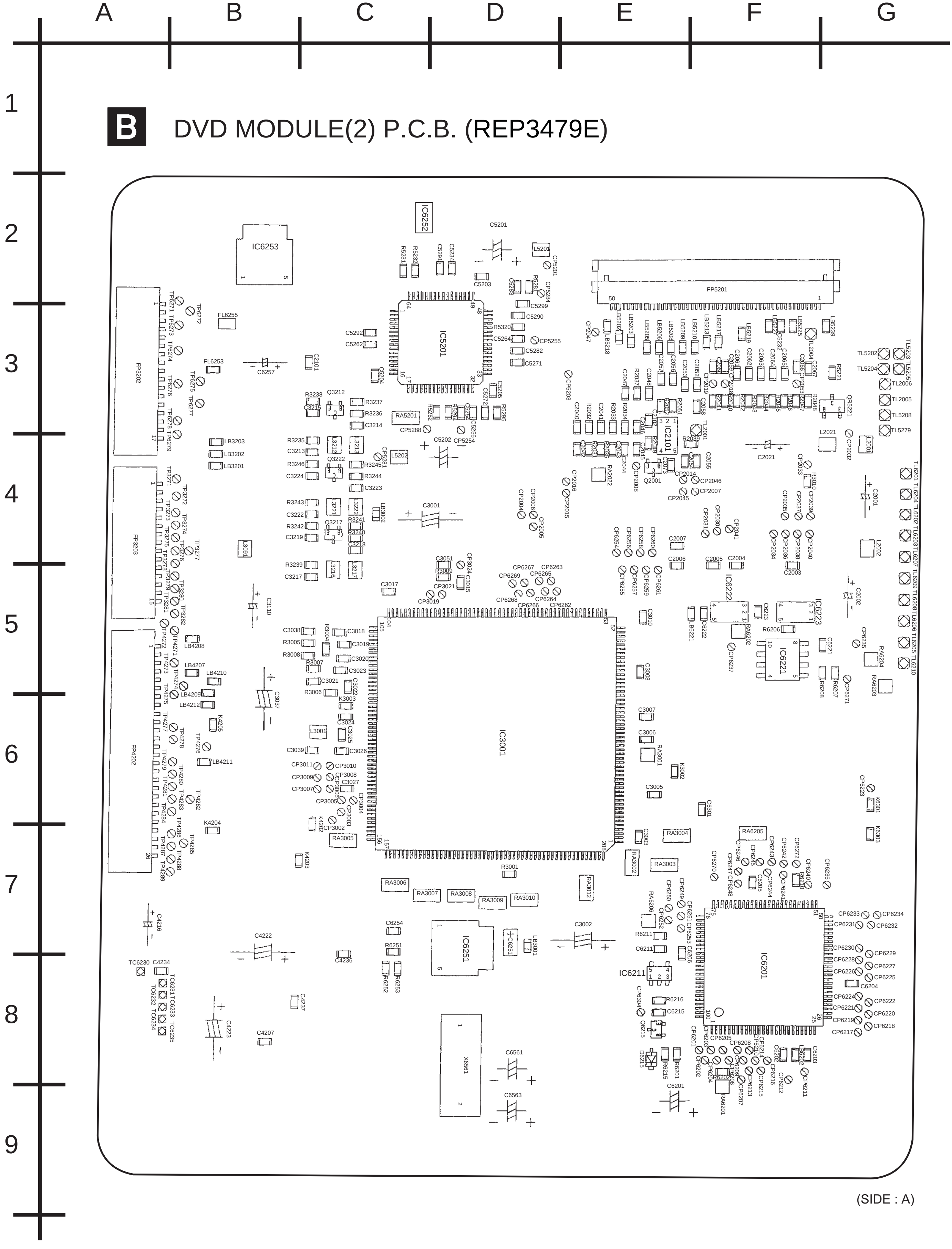
RA2521
IC2501
15
14
28
1
C2514
C2504
C2513
C2512
C2511
TC2513
K2502
R2503
TC2517
C2503
TC2516
C2502
C2501
R2504
M
M2501
SW2502
CLOSE
SW2501
OPEN
L5110
C5110
TC5113
R5112
C5115
C5111
R5116
R5113
R5114
TC5131
R5111
R5127
C
B E
Q5111
R5115
R5117
R5124
TC5132
C
B E
Q5115
TC5120
C5101
TC5122
R5126
R5101
D5131
TC5112
C5103
LB5103
TC5105
TC5107
C5102

(SIDE : B)

B DVD MODULE(2) P.C.B. (REP3479E)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CP6265
CP6268
CP6264
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CP5203
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R2034
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C2046
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CP2008
RA2022
CP2014
CP2046
CP2007
CP2045
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C2063
C2062
C2064
C2065
C2067
R2048
QR5221
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LB5202
LB5203
LB5205
LB5206
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LB5209
LB5210
LB5213
LB5217
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LB5219
LB5225
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CP2033
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CP2030
CP2041
CP2035
CP2037
CP2039
CP2034
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CP2038
CP2040
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C2003
C2007
C2006
C2005
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CP6257
CP6259
CP6261
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R6207
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TL6203
TL6207
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TL6206
TL6205
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C3007
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K3002
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C6301
C3003
RA3004
RA3002
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CP6241
CP6240
CP6236
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CP6249
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CP6253
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D6215
R6215
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100
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CP6227
CP6226
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CP6209
CP6207
CP6213
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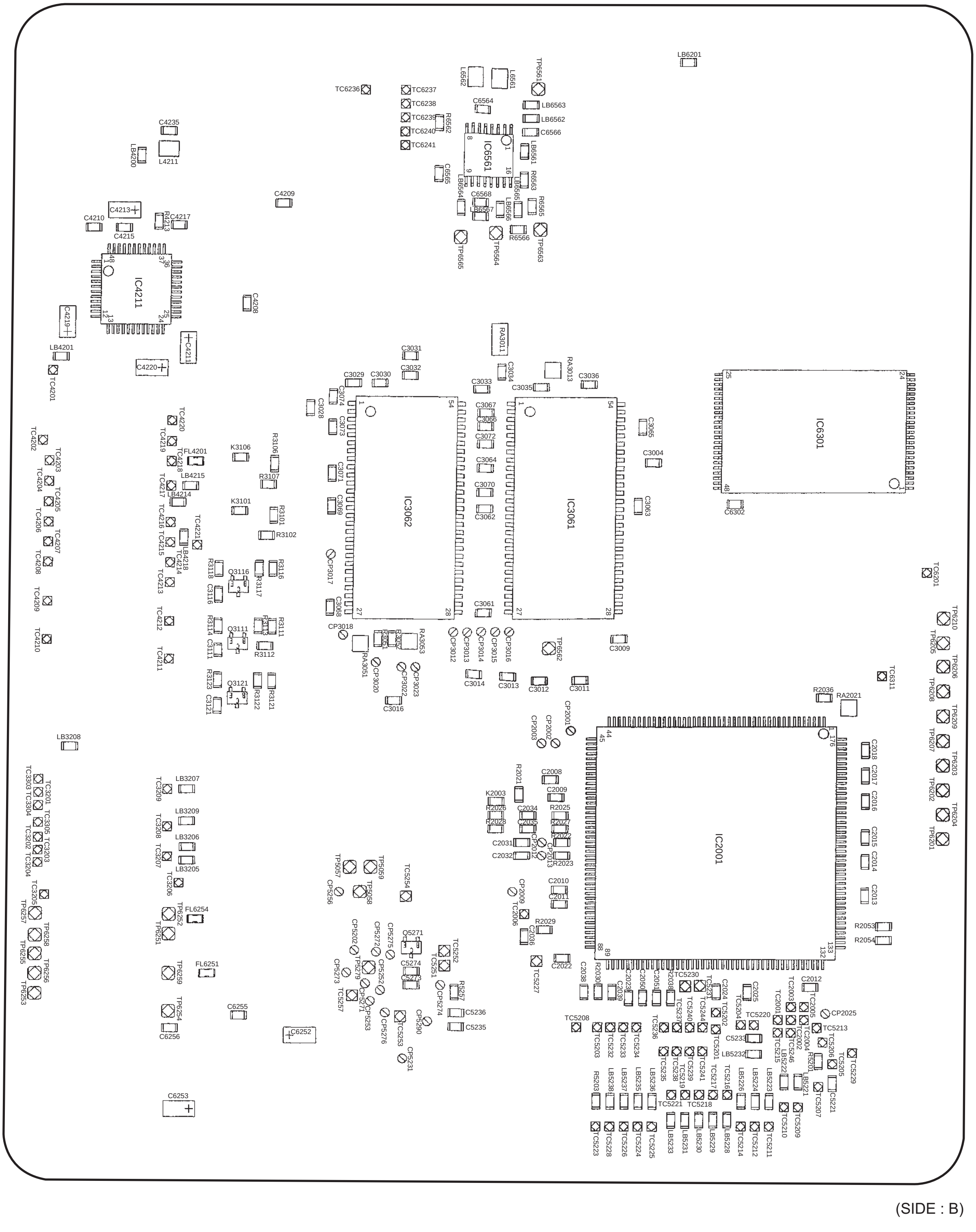
B DVD MODULE(2) P.C.B. (REP3479E)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R2028
C2035
R2027
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CP2009
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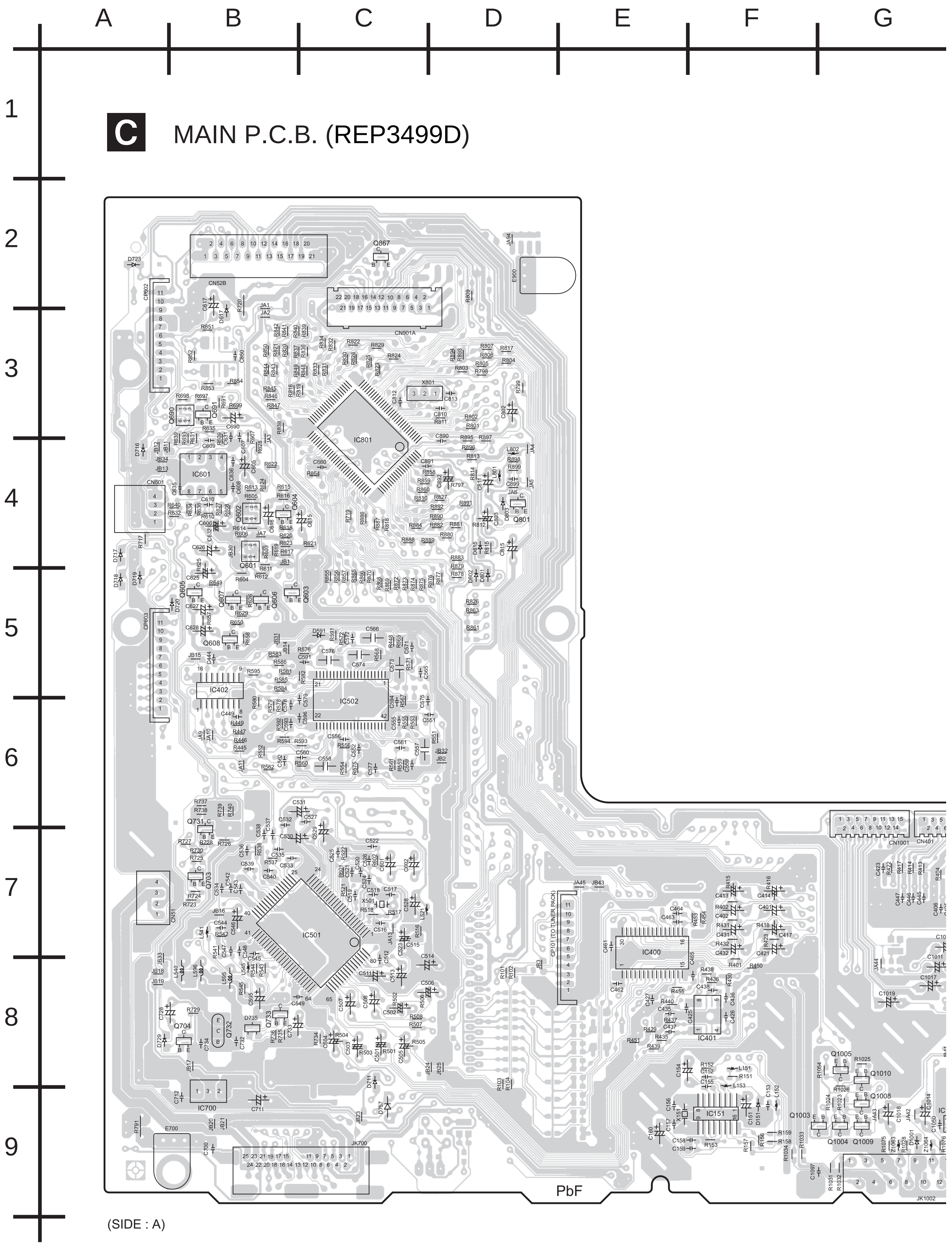
C MAIN P.C.B. (REP3499D)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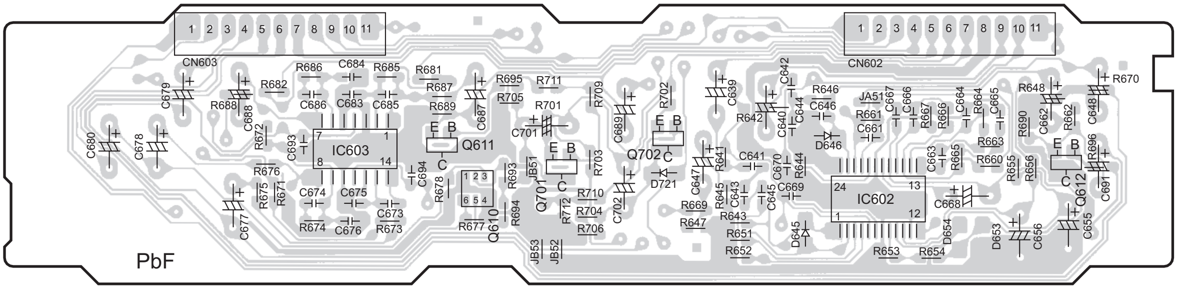
CP602
IC801
X801
IC601
CN601
Q690
Q691
Q601
Q602
Q604
Q605
Q606
Q607
Q603
Q608
Q801
CP603
IC402
IC502
IC501
Q731
Q703
CN51
Q704
Q732
Q733
IC700
E700
JK700
E900
JA94
CP101 (TO TUNER PACK)
IC400
IC401
IC151
CN1001
CN401
Q1005
Q1010
Q1008
Q1003
Q1004
Q1009
JK1002
PbF

(SIDE : A)

G H I J K L M

H BUFFER-AMP P.C.B. (REP3499D)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CN602
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IC603
IC602
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Q610
Q701
Q702
Q612
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R682 R687 R689 R705 R701 R709 R702
C679 R688 C686 C683 C685 C687 C701 C689
C680 C678 C688 R672 C693 C694 R678 R693 R694 JB51 R712 R703 C702
R676 R675 R671 C674 C675 C673 R674 C676 R673 R677 C677
R710 R704 R706 JB53 JB52 D721
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JA51 C667 C666 R661 C661 R667 R666 C664 R664 C665 R663 R660 C663 R665
C668 D654 R653 R654 D653 C656 C655 R655 R656 R690 R648 C662 R662 C648 R670 R696 C691
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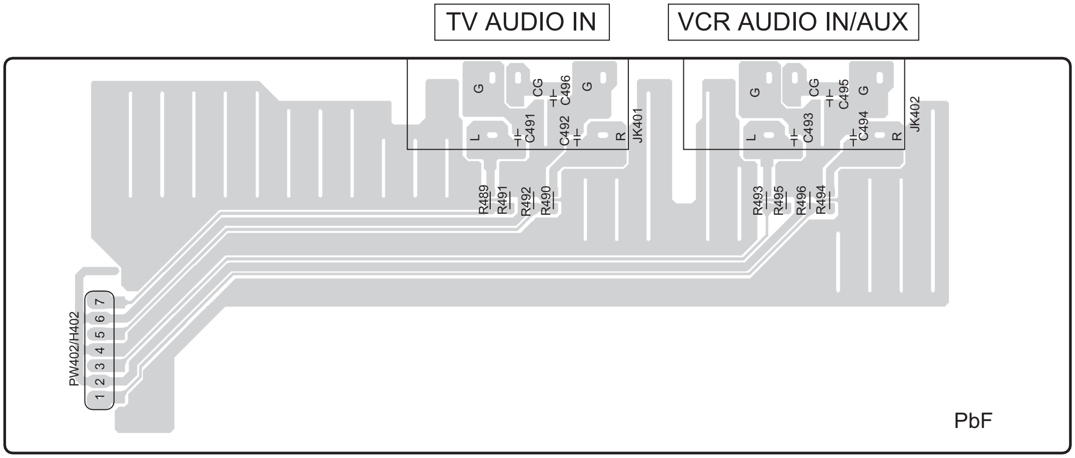
(SIDE : A)

G TV/VCR P.C.B. (REP3499D)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VCR AUDIO IN/AUX
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JK402
G CG G L R
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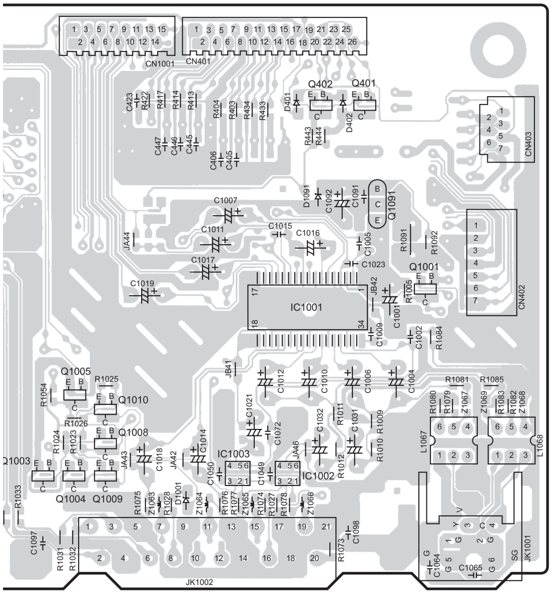
R489 R491 R492 R490 R493 R495 R496 R494
PW402/H402
1 2 3 4 5 6 7
PbF

(SIDE : A)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CN403
CN402
Q402 Q401
D401 D402
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C447 C446 C445 C406 C405 R443 R444
C1007 C1011 C1015 C1016 C1017 C1019 C1005 C1023
D1091 C1092 C1091 Q1091
JA44 R1091 R1092 Q1001 R1005
IC1001
JB42 C1009 C1001 C1002 R1084
JB41 C1012 C1010 C1006 C1004
Q1005 R1025 Q1010 R1054 R1026 Q1008 R1024 R1023 Q1003 Q1004 Q1009 JA43
C1018 JA42 C1014 IC1003 C1050 C1049 C1021 C1072 JA46 C1032 C1031 R1011 R1009 R1010 R1012 IC1002
R1081 R1085 R1080 R1079 Z1067 Z1069 R1083 R1082 Z1068 L1067 L1068
R1033 R1075 Z1063 R1028 D1001 Z1064 R1076 R1077 Z1065 R1074 R1027 R1078 Z1066 C1098
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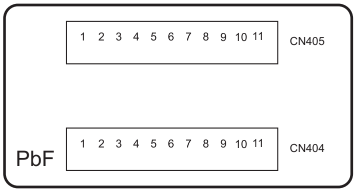
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CN404
PbF

D INTERFACE P.C.B. (REP3499D)

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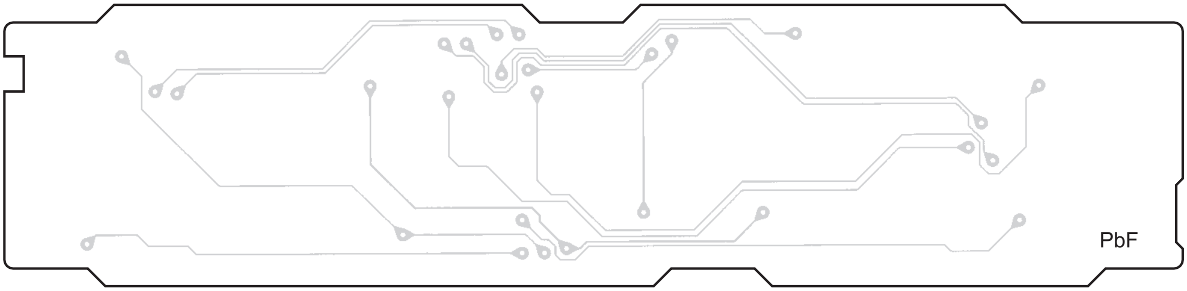
H BUFFER-AMP P.C.B (REP3499D)



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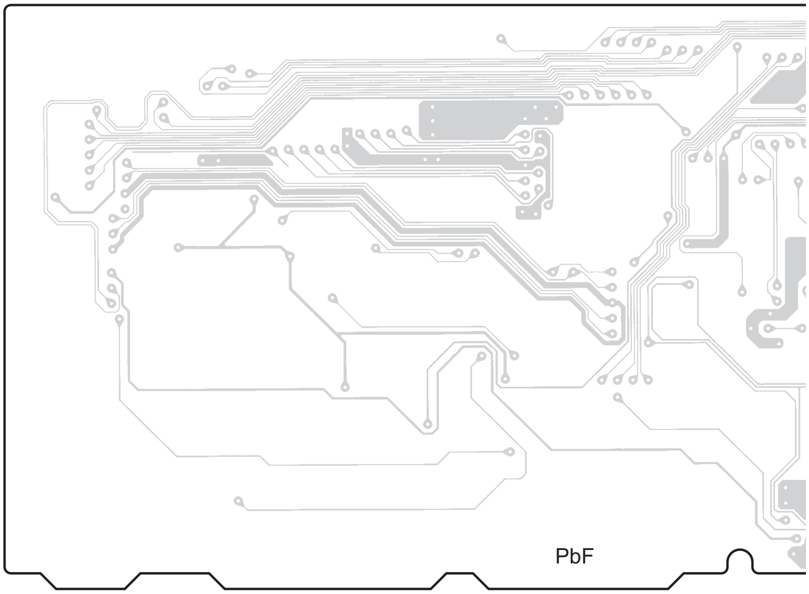
C MAIN P.C.B. (REP3499D)



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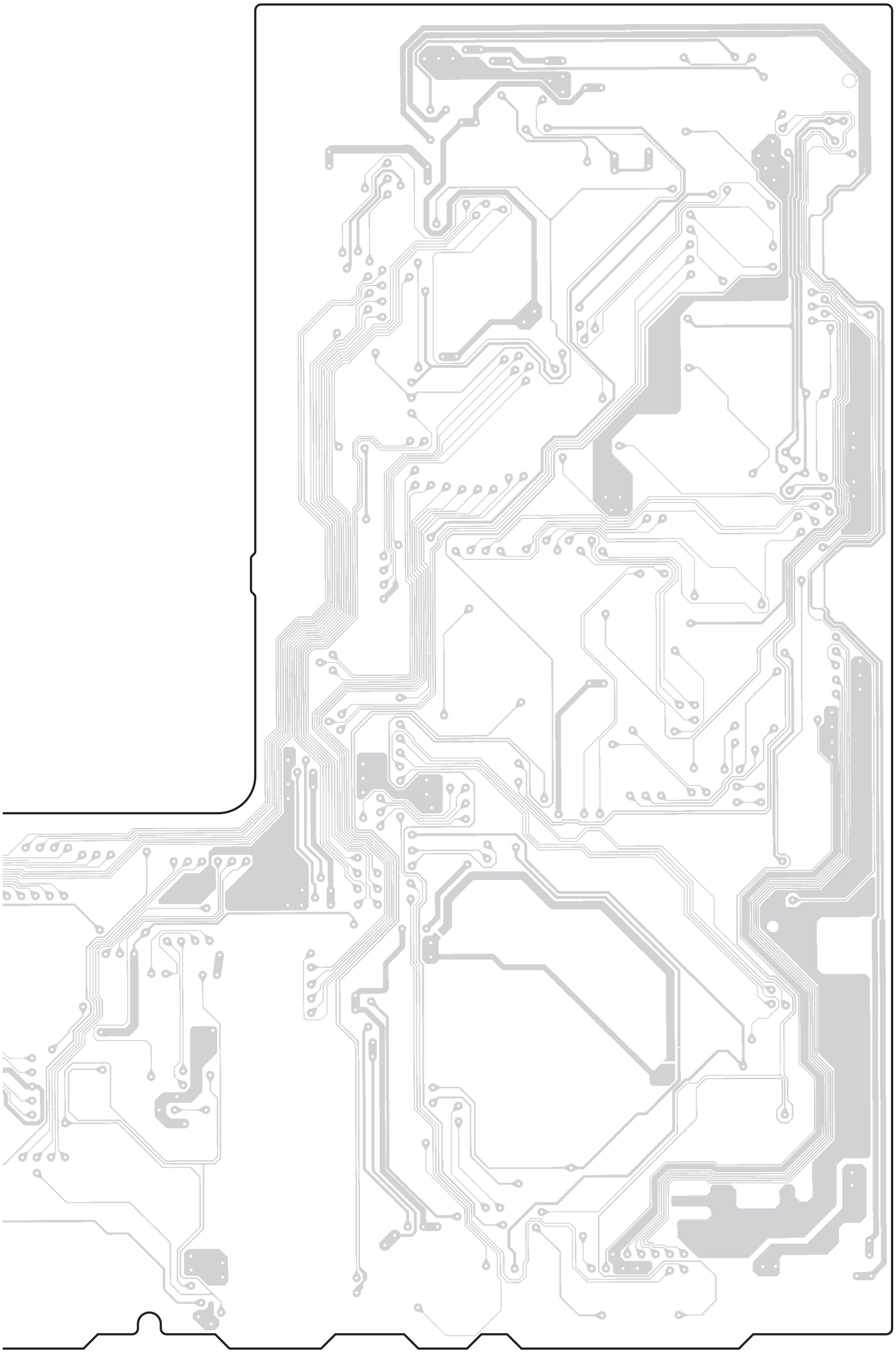
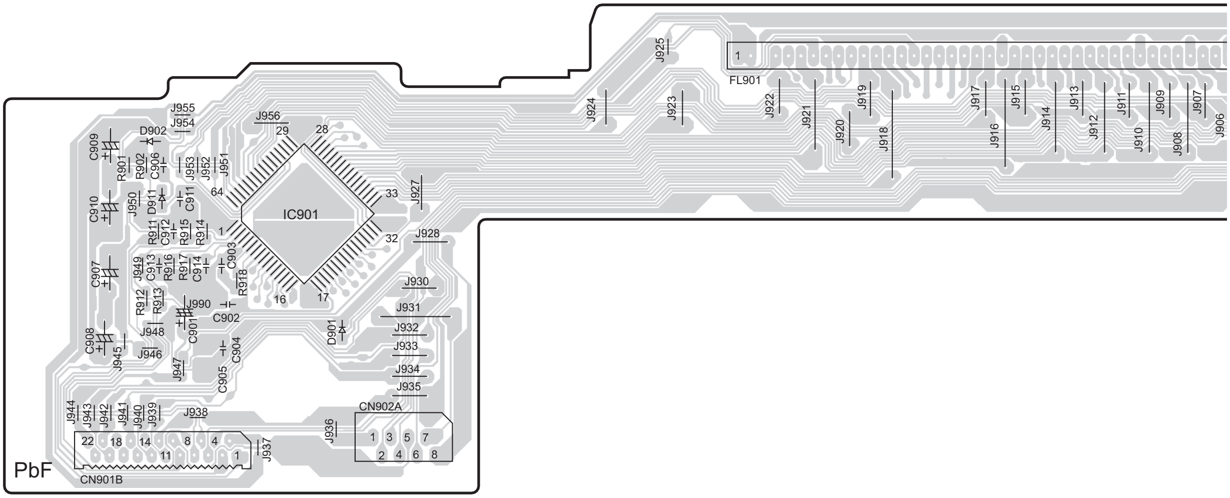


E PANEL P.C.B. (REPX0354A)



A
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IC901
FL901
CN901B
CN902A
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D901
D902
D911
C901
C902
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C904
C905
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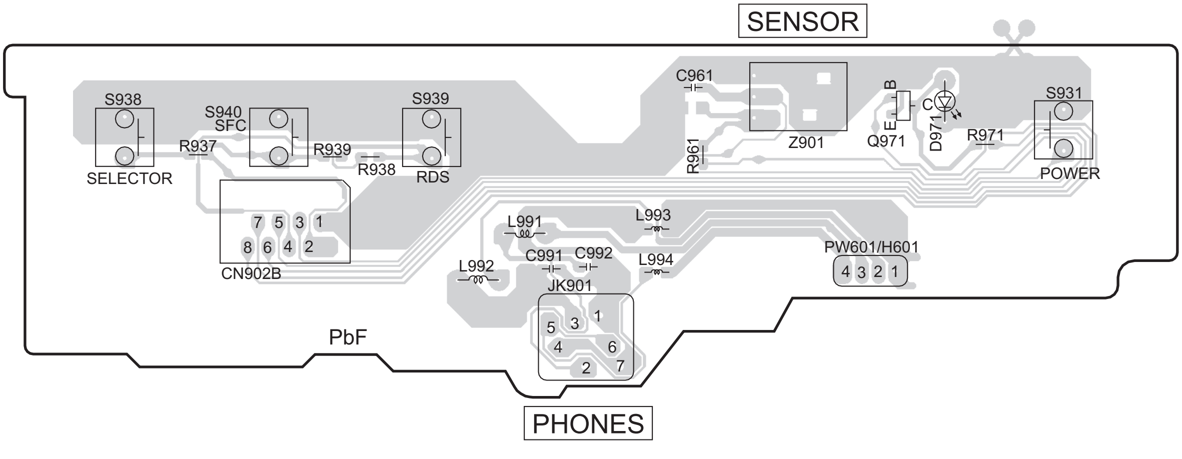
F SENSOR P.C.B. (REPX0354A)



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SENSOR
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SELECTOR
S940
SFC
R937
R939
R938
S939
RDS
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R961
Z901
Q971
E
B
C
D971
R971
S931
POWER
CN902B
L991
L992
L993
L994
C991
C992
JK901
PW601/H601
PbF
PHONES